



תעודת הסמכה מס' 10 מעבדות הכיול רפא"ל מחלקת אא"כ ואחזקה 78

כתובת אתר ייחוס: מחלקת אא"כ ואחזקה 78, ת.ד. 2250, חיפה, 3102102

עד יום: 23.06.2022

בתוקף מיום: 26.01.2020

הארגון נבדק ונבחן על ידי הרשות הלאומית להסמכת מעבדות (להלן הרשות) ונמצא ראוי להסמכה בהתאם לנספח פירוט היקף ההסמכה המצורף לתעודה זו, המהווה חלק בלתי נפרד ממנה ומספרו זהה למספר התעודה. הסמכה מצביעה על כשירות מקצועית ותפעול מערכת ניהול איכות בעלת הכרה בינלאומית. הארגון המוסמך על ידי הרשות, עומד בתקנים/ בדרישות המפורטים למעלה. דרישות התקנים הם לכשירות מקצועית ולמערכות ניהול, שהינן הכרחיות למתן תוצאות אמינות. הסמכה זו ניתנה בהתאם לכללי ISO/IEC 17011:2017 לפיהם פועלת הרשות ובמסגרתם מקיימת פיקוח שוטף על הארגון לצורך בחינת תפקודו המתמשך בהתאם לדרישות ההסמכה. ההסמכה תקפה כל עוד הארגון עונה לאמות המידה שנקבעו על ידי הרשות.

תעודה זו אינה מהווה אישור לפי סעיף 12 לחוק התקנים.

תאריך הסמכה ראשון: 24.06.1996

אתי פלר
מנכ"ל
הרשות הלאומית להסמכת מעבדות



הרשות הלאומית להסמכת מעבדות
Israel Laboratory Accreditation Authority

Calibration Laboratories

ISO/IEC 17025:2017

Accreditation Certificate No. 10
Rafael - Calibration Laboratories

Main site address: Quality and Maintenance Dept. 78, P.O.B. 2250, Haifa 3102102, Israel

Valid from: 26.01.2020

Until: 23.06.2022

The organization was assessed by the Israel Laboratory Accreditation Authority (ISRAC) and found to be worthy of accreditation to the detailed schedule attached.

The schedule is an integral part of this certificate and is numbered with the above certificate number.

Accreditation demonstrates technical competence and operation of an internationally recognized quality management system. The organization accredited by ISRAC complies with the standards/requirements mentioned above, meets the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically competent results. This accreditation is granted in accordance with the requirements of ISO/IEC 17011:2017, and entails periodic surveillance and reassessment by ISRAC to ensure that the organization continues to comply with the accreditation requirements.

The accreditation is valid provided that the organization continues to meet the criteria as laid down by ISRAC.

This certificate does not constitute an approval in accordance with article 12 of the standard law.

Date of first accreditation: 24.06.1996

Etty Feller
General Manager
Israel Laboratory Accreditation Authority

Date of signature 07/07/2020

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Name and Address:

Laboratory name Rafael - Calibration Laboratories Ltd.

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As declared by the Organization, following is a list of the permanent sites and the phones numbers at which accredited activities are performed.

- **P Haifa** +972-73-335-4494
- **P1 Leshem** +972-73-335-4722

Site: P or T or M , P-Permanent, T-Temporary, M-Mobile

A permanent (P) or temporary (T) place, or a stationary or mobile (M) facility, at or from which the organization performs activities forming part of its scope of accreditation, starting from sampling to final issuance of a report or certificate and / or quality system activities. A temporary (T) site is a site established under the responsibility of an accredited permanent site. All activities performed at a temporary site are the responsibility of the permanent site. An outdoors work is also considered to be a temporary site. Temporary site will be a site that involves work for special project and the activity will be defined in time (up to 2 years).

Type of Scopes: A- Fixed, C- Flexible scope in analytical tests : Type of matrix, analytes, experimental systems and/or analytical characteristics may be subject to changes, in accordance with the laboratory's approved and documented procedures. For details, please refer to the list of Accredited Tests, available from the laboratory upon request.



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישיר ותדר נמוך		
1	A	P	DC Voltage, Measuring Instruments	מכשירי מדידת מתח בורם ישר	±100 mV	4.5 μV/V	Manufacturer instructions SOP 10700	Standard cell: Fluke 732A UUT:Fluke DMM 8508A Main calibrator: Datron 4808
2	A	P			±1 V	1 μV/V		
3	A	P			±1.018 V	2.5 μV/V		
4	A	P			±10 V	1 μV/V		
5	A	P			±100 V	1.5 μV/V		
6	A	P			±1000 V	2.5 μV/V		
7	A	P			Short	340 nV		
8	A	P			[0 mV to 200 mV]	4.5μV		
9	A	P			(200 mV to 2 V]	4.5 μV/V		
10	A	P			(2 V to 20 V]	4.5 μV/V		
11	A	P			(20 V to 200 V]	4.5 μV/V		
12	A	P			(200 V to 1000 V]	5.5 μV/V		
13	A	T			Short	0.1 μV		
14	A	T			[0 to 200 mV]	4 μV		
15	A	T			(200 mV to 2 V]	8 μV/V		
16	A	T			(2 V to 20 V]	5 μV/V		
17	A	T			(20 V to 200 V]	5 μV/V		
18	A	T			(200 V to 1100 V]	3.5 μV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
19	A	P	DC Voltage, Sources	מחוללי מתח בזרם ישר	±100 mV	2 μV/V	Manufacturer instructions	Standard cell: Fluke 732A
20	A	P			±1 V	1 μV/V	SOP 10500	DMM: Fluke 8508A
21	A	P			±1.018 V	1 μV/V	SOP 10650	Main Calibrator: Fluke 732A or Datron 4808
22	A	P			±10 V	1 μV/V		
23	A	P			±100 V	1 μV/V		
24	A	P			±1000 V	1.9 μV/V		DMM: Wavetek MTS 4950
25	A	P			[0 to 200 mV]	1μV		
26	A	P			(200 mV to 2 V]	3 μV/V		
27	A	P			(2 V to 20 V]	3μV/V		
28	A	P			(20 V to 200 V]	3.5μV/V		
29	A	P			(200 V to 1000 V]	3.5μV/V		
30	A	T			[0 to 50 mV]	1 μV		DMM: Fluke 8508A
31	A	T			(50 mV to 200 mV]	17 μV/V		Main Calibrator: Datron 4808
32	A	T			(200 mV to 2 V]	4.5 μV/V		
33	A	T			(2 V to 20 V]	3.5 μV/V		
34	A	T			(20 V to 200 V]	3 μV/V		
35	A	T			(200 V to 1100 V]	5.5 μV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks	
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
36	A	P	DC Current, Measuring Instruments	זרם ישר, מכשירי מדידה	100 μA	8.5 μA/A	Manufacturer instructions SOP 10700	Standard resistors	
37	A	P			1 mA	4 μA/A		Fluke DMM 8508A	
38	A	P			10 mA	4.5 μA/A		Wavetek MTS 4950	
39	A	P			100 mA	3.5 μA/A		Datron Calibrator 4808	
40	A	P			1 A	4.5 μA/A			
41	A	P			10 A	29 μA/A		Datron 4600	
42	A	P			Open	0.1 nA		Transconductance amplifier	
43	A	P			[0 to 200 μ A]	1.5 nA		Wavetek 9100	
44	A	P			(200 μA to 2 mA]	8 nA		Current Coils	
45	A	P			(2 mA to 20 mA]	77 nA			
46	A	P			(20 mA to 200 mA]	1 μA			
47	A	P			(200 mA to 2 A]	7 μA			
48	A	P			(2 A to 11 A]	30 μA/A			
49	A	T				Open	0.1 nA		Datron Calibrator 4808
50	A	T				[0 μA to 20 μA]	5 nA		
51	A	T				(20 μA to 50 μA]	1 nA		
52	A	T				(50 μA to 200 μA]	9 μA/A		
53	A	T				(200 μA to 1 mA]	4 nA		
54	A	T				(1 mA to 2 mA]	10 μA/A		



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
55	A	T			(2 mA to 10 mA]	0.1 μA		
56	A	T			(10 mA to 20 mA]	10 μA/A		
57	A	T			(20 mA to 100 mA]	1 μA		
58	A	T			(100 mA to 200 mA]	15 μA/A		
59	A	T			(200 mA to 500 mA]	21 μA		
60	A	T			(500 mA to 2 A]	21 μA/A		
61	A	T			(2 A to 5 A]	1 mA		
62	A	T			(5 A to 10 A]	120 μA/A		
63	A	P	DC Current, Sources	זרם ישר, מקורות	100 μA	8.5 μA/A	Manufacturer instructions	Standard resistors
64	A	P			1 mA	3.5 μA/A	SOP 10560	Fluke DMM 8508A
65	A	P			10 mA	4.5 μA/A	SOP 10650	Wavetek MTS 4950
66	A	P			100 mA	3.5 μA/A		Datron 4808
67	A	P			1 A	4.5 μA/A		Datron 9100
68	A	P			10 A	24 μA/A		Current coils
69	A	P			[0 μA to 200 μA]	4 nA		Current clamp
70	A	P			(200 μA to 2 mA]	17 μA/A		
71	A	P			(2 mA to 20 mA]	17 μA/A		
72	A	P			(20 mA to 200 mA]	50 μA/A		
73	A	P			(200 mA to 2 A]	50 μA/A		



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
74	A	P			(2 A to 11 A]	200 μA/A		
75	A	T			[0 μA to 10 μA]	4 nA		
76	A	T			(10 μA to 100 μA]	1 nA		
77	A	T			(100 μA to 200 μA]	1 nA		
78	A	T			(200 μA to 1 mA]	34 nA		
79	A	T			(1 mA to 2 mA]	34 nA		
80	A	T			(2 mA to 10 mA]	1μA		
81	A	T			(10 mA to 20 mA]	1 μA		
82	A	T			(20 mA to 100 mA]	10 μA		
83	A	T			(100 mA to 200 mA]	10 μA		
84	A	T			(200 mA to 1 A]	74 μA		
85	A	T			(1 A to 2 A]	74 μA/A		
86	A	T			(2 A to 11 A]	182 μA/A		
87	A	T			(11 A to 1000 A]	17 mA/A		
88	A	P	DC Resistance, Resistors	התנגדות זרם ישר, נגדים	0.001 Ω	75 μΩ/Ω	Manufacturer instructions SOP 10800	Standard resistors
89	A	P			0.01 Ω	20 μΩ/Ω		Datron 4808
90	A	P			0.1 Ω	10 μΩ/Ω		Wavetek 9100
91	A	P			1 Ω	1 μΩ/Ω		Fluke 8508A
92	A	P			10 Ω	2 μΩ/Ω		Wavetek 4950



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Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
93	A	P		25 Ω	4 μΩ/Ω	Manufacturer instructions SOP 10650	Keithley 5155
94	A	P		50 Ω	4 μΩ/Ω		
95	A	P		100 Ω	3 μΩ/Ω		
96	A	P		200 Ω	4 μΩ/Ω		
97	A	P		400 Ω	8 μΩ/Ω		
98	A	P		1 kΩ	5 μΩ/Ω		
99	A	P		10 kΩ	10 μΩ/Ω		
100	A	P		100 kΩ	10 μΩ/Ω		
101	A	P		1 MΩ	10 μΩ/Ω		
102	A	P		10 MΩ	20 μΩ/Ω		
103	A	P		100 MΩ	50 μΩ/Ω		
104	A	P		1 GΩ	0.1 %		
105	A	P		10 GΩ	2 mΩ/Ω		
106	A	P		100 GΩ	1 mΩ/Ω		
107	A	P		1000 GΩ	1 mΩ/Ω		
108	A	P		(0 to 1Ω]	23 μΩ		Fluke 8508A
109	A	P		(1 Ω to 20 Ω]	5 μΩ/Ω		
110	A	P		(20 Ω to 200 Ω]	5 μΩ/Ω		
111	A	P		(200 Ω to 2 kΩ]	8 μΩ/Ω		



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
112	A	P			(2 kΩ to 20 kΩ]	10 μΩ/Ω		
113	A	P			(20 kΩ to 200 kΩ]	10 μΩ/Ω		
114	A	P			(200 kΩ to 2 MΩ]	10 μΩ/Ω		
115	A	P			(2 MΩ to 20 MΩ]	40 μΩ/Ω		
116	A	P			(20 MΩ to 100 MΩ]	220 μΩ/Ω		
117	A	T			(0 to 1 Ω]	45 μΩ		
118	A	T			(1 Ω to 5 Ω]	43 μΩ/Ω		
119	A	T			(5 Ω to 20 Ω]	25 μΩ/Ω		
120	A	T			(20 Ω to 200 Ω]	18 μΩ/Ω		
121	A	T			(200 Ω to 2 kΩ]	18 μΩ/Ω		
122	A	T			(2 kΩ to 20 kΩ]	18 μΩ/Ω		
123	A	T			(20 kΩ to 200 kΩ]	19 μΩ/Ω		
124	A	T			(200 kΩ to 2 MΩ]	31 μΩ/Ω		
125	A	T			(2 MΩ to 20 MΩ]	95 μΩ/Ω		
126	A	T			(20 MΩ to 100 MΩ]	950 μΩ/Ω		
127	A	P			DC Resistance, Measuring Instruments	התנגדות זרם ישר, מכשירי מדידה		
128	A	P	0.01 Ω	30 μΩ/Ω			Wavetek 9100	
129	A	P	0.1 Ω	10 μΩ/Ω			Fluke 8508A	
130	A	P	1 Ω	0.5 μΩ/Ω			G.R. Decade resistors Wavetek 4950	



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Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
131	A	P		10 Ω	2 μΩ/Ω		
132	A	P		25 Ω	3 μΩ/Ω		
133	A	P		50 Ω	3 μΩ/Ω		
134	A	P		100 Ω	3 μΩ/Ω		
135	A	P		200 Ω	5 μΩ/Ω		
136	A	P		1 kΩ	5 μΩ/Ω		
137	A	P		10 kΩ	10 μΩ/Ω		
138	A	P		100 kΩ	10 μΩ/Ω		
139	A	P		1 MΩ	10 μΩ/Ω		
140	A	P		10 MΩ	30 μΩ/Ω		
141	A	P		100 MΩ	50 μΩ/Ω		
142	A	P		1 GΩ	0.1 %		Keithley 5155
143	A	P		10 GΩ	0.2 %		Keithley 5155
144	A	P		100 GΩ	0.1 %		Keithley 5155
145	A	P		1000 GΩ	0.1 %		Keithley 5155
146	A	P		(0 to 5 Ω]	120 μΩ		
147	A	P		(5 Ω to 20 Ω]	22 μΩ/Ω		
148	A	P		(20 Ω to 200 Ω]	17 μΩ/Ω		
149	A	P		(200 Ω to 2 kΩ]	15 μΩ/Ω		



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
150	A	P			(2 kΩ to 20 kΩ]	23 μΩ/Ω		
151	A	P			(20 kΩ to 200 kΩ]	15 μΩ/Ω		
152	A	P			(200 kΩ to 2 MΩ]	37 μΩ/Ω		
153	A	P			(2 MΩ to 20 MΩ]	95 μΩ/Ω		
154	A	P			(20 MΩ to100 MΩ]	250 μΩ/Ω		
155	A	T			(0 to 0.1 Ω]	10 μΩ	Manufacturer instructions	Wavetek 9100 G.R. Decade resistors
156	A	T			(0.1 to 5 Ω]	140 μΩ		
157	A	T			(5 Ω to 20 Ω]	28 μΩ/Ω		
158	A	T			(20 Ω to 200 Ω]	18 μΩ/Ω		
159	A	T			(200 Ω to 2 kΩ]	18 μΩ/Ω		
160	A	T	(2 kΩ to 20 kΩ]	23 μΩ/Ω				
161	A	T	(20 kΩ to 200 kΩ]	19 μΩ/Ω				
162	A	T	(200 kΩ to 2 MΩ]	37 μΩ/Ω				
163	A	T	(2 MΩ to 20 MΩ]	95 μΩ/Ω				
164	A	T	(20 MΩ to 100 MΩ]	950 μΩ/Ω				
165	A	P	AC Voltage, Sources	מתח חילופין, מחוללים	100 mV	41 μV/V	Manufacturer instructions SOP 10550	Datron 4920 Datron 4922 Wavetek MTS 4950
166	A	P			1 kHz			
167	A	P			30 kHz			
168	A	P			60 kHz			
					100 kHz	97 μV/V		



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך				
169	A	P			300 mV	33 μV/V				
170	A	P			40 Hz				34 μV/V	
171	A	P			1 kHz				45 μV/V	
172	A	P			30 kHz				73 μV/V	
173	A	P			50 kHz				74 μV/V	
174	A	P			100 kHz				140 μV/V	
175	A	P			1 V	200 kHz			280 μV/V	280 μV/V
176	A	P				500 kHz			720 μV/V	
177	A	P				700 kHz			720 μV/V	
178	A	P				1 MHz			130 μV/V	
179	A	P				10 Hz			29 μV/V	
180	A	P				40 Hz			29 μV/V	
181	A	P				1 kHz			30 μV/V	
182	A	P				30 kHz			66 μV/V	
183	A	P				50 kHz			67 μV/V	
184	A	P				60 kHz			68 μV/V	
185	A	P				100 kHz			75 μV/V	
186	A	P				200 kHz			280 μV/V	
						500 kHz				



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
187	A	P			700 kHz	720 μV/V			
188	A	P			1 MHz	720 μV/V			
189	A	P			50 MHz	20 mV/V			
190	A	P			3 V	10 Hz			130 μV/V
191	A	P			40 Hz	31 μV/V			
192	A	P			1 kHz	29 μV/V			
193	A	P			30 kHz	30 μV/V			
194	A	P			50 kHz	66 μV/V			
195	A	P			100 kHz	66 μV/V			
196	A	P			200 kHz	74 μV/V			
197	A	P			500 kHz	270 μV/V			
198	A	P			700 kHz	710 μV/V			
199	A	P			1 MHz	710 μV/V			
200	A	P			5 MHz	20 mV/V			
201	A	P			10 MHz	20 mV/V			
202	A	P			20 MHz	20 mV/V			
203	A	P			30 MHz	20 mV/V			
204	A	P	5 V	1 kHz	28 μV/V				



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישיר ותדר נמוך		
205	A	P		10 V 10 Hz	41 μ V/V		
206	A	P		40 Hz	29 μ V/V		
207	A	P		1 kHz	28 μ V/V		
208	A	P		30 kHz	28 μ V/V		
209	A	P		50 kHz	66 μ V/V		
210	A	P		60 kHz	66 μ V/V		
211	A	P		100 kHz	66 μ V/V		
212	A	P		200 kHz	73 μ V/V		
213	A	P		500 kHz	270 μ V/V		
214	A	P		700 kHz	710 μ V/V		
215	A	P		1 MHz	710 μ V/V		
216	A	P		20 V 500 kHz	270 μ V/V		
217	A	P		700 kHz	710 μ V/V		
218	A	P		1 MHz	710 μ V/V		
219	A	P		30 V 10 Hz	130 μ V/V		
220	A	P		40 Hz	37 μ V/V		
221	A	P		1 kHz	29 μ V/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
222	A	P			30 kHz	29 μV/V		
223	A	P			50 kHz	66 μV/V		
224	A	P			100 kHz	71 μV/V		
225	A	P			200 kHz	89 μV/V		
226	A	P			10 Hz	43 μV/V		
227	A	P			40 Hz	40 μV/V		
228	A	P			1 kHz	28 μV/V		
229	A	P			30 kHz	28 μV/V		
230	A	P			50 kHz	66 μV/V		
231	A	P			60 kHz	66 μV/V		
232	A	P			100 kHz	66 μV/V		
233	A	P			45 Hz	44 μV/V		
234	A	P			1 kHz	43 μV/V		
235	A	P			5 kHz	45 μV/V		
236	A	P			10 kHz	43 μV/V		
237	A	P			15 kHz	43 μV/V		
238	A	P			20 kHz	43 μV/V		
239	A	P			33 kHz	100 μV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks				
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך						
240	A	P			50 kHz	120 μV/V						
241	A	P			500 V	100 kHz			160 μV/V			
242	A	P				100 kHz			160 μV/V			
243	A	P			700 V	50 kHz			160 μV/V			
					1000 V							
244	A	P				45 Hz			45 μV/V			
245	A	P				1 kHz			45 μV/V			
246	A	P				5 kHz			45 μV/V			
247	A	P				10 kHz			48 μV/V			
248	A	P				15 kHz			48 μV/V			
249	A	P				20 kHz			48 μV/V			
250	A	P				30 kHz			110 μV/V			
251	A	P				33 kHz			110 μV/V			
252	A	P				[0.9 mV to 3 mV]			490 μV/V		Datron 4920 Datron 4922	
253	A	P				[40 Hz to 200 kHz]						
254	A	P	(200 kHz to 500 kHz)									
			(500 kHz to 1 MHz)		3.3 mV/V							



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
255	A	P		(3 mV to 9 mV] [40 Hz to 200 kHz]	350 μ V/V		
256	A	P		(200 kHz to 500 KHz]	1.1 mV/V		
257	A	P		(500 kHz to 1 MHz]	2.6 mV/V		
258	A	P		(9 mV to 30 mV] [40 Hz to 200 kHz]	220 μ V/V		
259	A	P		(200 kHz to 500 KHz]	620 μ V/V		
260	A	P		(500 kHz to 1 MHz]	1.6 mV/V		
261	A	P		(30 mV to 350 mV] [40 Hz to 200 kHz]	150 μ V/V		
262	A	P		(200 kHz to 500 kHz]	340 μ V/V		
263	A	P		(500 kHz to 1 MHz]	860 μ V/V		
264	A	P		(350 mV to 35 V] [40 Hz to 200 kHz]	110 μ V/V		
265	A	P		(200 kHz to 500 kHz]	350 μ V/V		
266	A	P		(500 kHz to 1 MHz]	860 μ V/V		
267	A	P		[1 V to 3.5 V] [1 MHz to 30 MHz]	20 mV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
268	A	P			(35 V to 120 V] [10 Hz to 100 kHz]	85 μV/V		
269	A	P			(20 V to 500 V] [45 Hz to 100 kHz]	180 μV/V		
270	A	P			(500 V to 700 V] [45 Hz to 50 kHz]	180 μV/V		
271	A	P			(700 V to 1000 V] [45 Hz to 33 kHz]	130 μV/V		
272	A	P	AC Voltage. Measuring Instruments	מתח חילופין, מכשירי מדידה	100 mV	41 μV/V 77 μV/V 97 μV/V 97 μV/V 34 μV/V 35 μV/V 45 μV/V 73 μV/V 74 μV/V 135 μV/V	Manufacturer instructions SOP 10700	Datron 4920 Datron 4922 Datron 4808
273	A	P			1 kHz			
274	A	P			30 kHz			
275	A	P			60 kHz			
276	A	P			100 kHz			
277	A	P			300 mV			
278	A	P			40 Hz			
279	A	P			1 kHz			
280	A	P			30 kHz			
281	A	P			50 kHz			



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks	
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
282	A	P			500 kHz	280 μV/V			
283	A	P			700 kHz	720 μV/V			
284	A	P			1MHz	720 μV/V			
285	A	P			1 V	10 Hz			130 μV/V
286	A	P			40 Hz	30 μV/V			
287	A	P			1kHz	29 μV/V			
288	A	P			30 kHz	31 μV/V			
289	A	P			50 kHz	67 μV/V			
290	A	P			60 kHz	67 μV/V			
291	A	P			100 kHz	68 μV/V			
292	A	P			200 kHz	75 μV/V			
293	A	P			500 kHz	279 μV/V			
294	A	P			700 kHz	720 μV/V			
295	A	P			1 MHz	720 μV/V			
296	A	P			50 MHz	20 mV/V			
297	A	P			3 V	10 Hz			130 μV/V
298	A	P	40 Hz	35 μV/V					
299	A	P	1 kHz	30 μV/V					



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks	
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
300	A	P			30 kHz	32 μV/V			
301	A	P			50 kHz	67 μV/V			
302	A	P			100 kHz	66 μV/V			
303	A	P			200 kHz	75 μV/V			
304	A	P			500 kHz	270 μV/V			
305	A	P			700 kHz	710 μV/V			
306	A	P			1 MHz	76 μV/V			
307	A	P			5 kHz	20 mV/V			
308	A	P			10 MHz	20 mV/V			
309	A	P			20 MHz	20 mV/V			
310	A	P			30 MHz	20 mV/V			
311	A	P			5 V	1 kHz			28 μV/V
312	A	P			10 V	10 Hz			47 μV/V
313	A	P				40 Hz			30 μV/V
314	A	P				1 kHz			28 μV/V
315	A	P				30 kHz			29 μV/V
316	A	P				50 kHz			66 μV/V
317	A	P				60 kHz			66 μV/V



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
318	A	P			100 kHz	66 μV/V		
319	A	P			200 kHz	73 μV/V		
320	A	P			500 kHz	270 μV/V		
321	A	P			700 kHz	710 μV/V		
322	A	P			1 MHz	710 μV/V		
323	A	P			500 kHz	270 μV/V		
324	A	P			700 kHz	710 μV/V		
325	A	P			1 MHz	710 μV/V		
326	A	P			10 Hz	130 μV/V		
327	A	P			40 Hz	38 μV/V		
328	A	P			1 kHz	30 μV/V		
329	A	P			30 kHz	30 μV/V		
330	A	P			50 kHz	66 μV/V		
331	A	P			100 kHz	76 μV/V		
332	A	P			200 kHz	110 μV/V		
333	A	P			10 Hz	49 μV/V		
334	A	P			40 Hz	42 μV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks	
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
335	A	P			1 kHz	29 μV/V			
336	A	P			30 kHz	29 μV/V			
337	A	P			50 kHz	66 μV/V			
338	A	P			60 kHz	66 μV/V			
339	A	P			100 kHz	67 μV/V			
340	A	P			300 V	45 Hz			45 μV/V
341	A	P				1 kHz			43 μV/V
342	A	P			500 V	5 kHz			47 μV/V
343	A	P				10 kHz			43 μV/V
344	A	P				15 kHz			43 μV/V
345	A	P				20 kHz			43 μV/V
346	A	P				33 kHz			100 μV/V
347	A	P				50 kHz			130 μV/V
348	A	P				100 kHz			160 μV/V
349	A	P	700 V	100 kHz		160 μV/V			
350	A	P		50 kHz	160 μV/V				



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
351	A	P		1000 V			
352	A	P		45 Hz	45 μ V/V		
353	A	P		1 kHz	45 μ V/V		
354	A	P		5 kHz	45 μ V/V		
355	A	P		10 kHz	49 μ V/V		
356	A	P		15 kHz	49 μ V/V		
357	A	P		20 kHz	49 μ V/V		
358	A	P		30 kHz	110 μ V/V		
359	A	P		33 kHz	110 μ V/V		
360	A	P		[0.9 mV to 3.0 mV]			
361	A	P		(40 Hz to 200 kHz)	490 μ V/V		
362	A	P		(200 kHz to 500 kHz)	1.4 mV/V		
363	A	P		(500 kHz to 1 MHz)	3.3 mV/V		
364	A	P		(3.0 mV to 9 mV)			
365	A	P		[40 Hz to 200 kHz]	350 μ V/V		
366	A	P		(200 kHz to 500 kHz)	1.1 mV/V		
				(500 kHz to 1 MHz)	2.6 mV/V		
				(9 mV to 30 mV)			
				[40 Hz to 200 kHz]	220 μ V/V		
				(200 kHz to 500 kHz)	620 μ V/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישיר ותדר נמוך		
367	A	P			(500 kHz to 1 MHz]	1.6 mV/V		
					(30 mV to 350 mV]			
368	A	P			[40 Hz to 200 kHz]	150 μV/V		
369	A	P			(200 kHz to 500 kHz]	340 μV/V		
370	A	P			(500 kHz to 1 MHz]	860 μV/V		
					(350 mV to 35 V]			
371	A	P			[40 Hz to 200 kHz]	120 μV/V		
372	A	P			(200 kHz to 500 kHz]	330 μV/V		
373	A	P			(500 kHz to1 MHz]	860 μV/V		
					[1 V to 3.5 V]			
374	A	P			[1 MHz to 30 MHz]	20 mV/V		
					(35 V to 120 V]			
375	A	P			[10 Hz to 100 kHz]	85 μV/V		
					(120 V to 500 V]			
376	A	P			[45 Hz to 100 kHz]	180 μV/V		
					(500 V to 700 V]			
377	A	P			[45 Hz to 50 kHz]	180 μV/V		
					(700 V to 1000 V]			
378	A	P			[45 Hz to 33 kHz]	130 μV/V		
					[1 mV to 2 mV]			
379	A	T			[40 Hz to 100 kHz]	9 mV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישיר ותדר נמוך		
380	A	T			(100 kHz to 300 kHz]	14 mV/V		
381	A	T			(300 kHz to 1 MHz]	43 mV/V		
					(2 mV to 5 mV]			
382	A	T			[40Hz to 100 kHz]	9.6 μV		
383	A	T			(100 kHz to 300 kHz]	18 μV		
384	A	T			(300 kHz to 1 MHz]	69 μV		
					(5 mV to 10 mV]			
385	A	T			[40 Hz to 100 kHz]	14 μV		
386	A	T			(100 kHz to 300 kHz]	22 μV		
387	A	T			(300 kHz to 1 MHz]	14 mV/V		
					(10 mV to 20 mV]			
388	A	T			[40 Hz to 100 kHz]	1.4 mV/V		
389	A	T			(100 kHz to 300 kHz]	2.2 mV/V		
390	A	T			(300 kHz to 1 MHz]	10 mV/V		
					(20 mV to 50 mV]			
391	A	T			[40 Hz to 100 kHz]	0.92 mV/V		
392	A	T			(100 kHz to 300 kHz]	2.5 mV/V		
393	A	T			(300 kHz to 1 MHz]	430 μV		
					(50 mV to 100 mV]			
394	A	T			[40 Hz to 100 kHz]	580 μV/V		
395	A	T			(100 kHz to 300 kHz]	1.6 mV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישיר ותדר נמוך		
396	A	T		(300 kHz to 1 MHz)	8.5 mV/V		
				(100 mV to 200 mV)			
397	A	T		[40 Hz to 100 kHz]	480 μ V/V		
398	A	T		(100 kHz to 300 kHz)	1.4mV/V		
399	A	T		(300 kHz to 1 MHz)	620 μ V/V		
				(200 mV to 500 mV)			
400	A	T		[40 Hz to 100 kHz]	490 μ V/V		
401	A	T		(100 kHz to 300 kHz)	0.54 mV		
402	A	T		(300 kHz to 1 MHz)	7.9 mV/V		
				(500 mV to 1 V)			
403	A	T		[40 Hz to 100 kHz]	3.9 mV/V		
404	A	T		(100 kHz to 300 kHz)	1.1mV/V		
405	A	T		(300 kHz to 1 MHz)	5.3mV/V		
				(1 V to 2 V)			
406	A	T		[40 Hz to 100 kHz]	360 μ V/V		
407	A	T		(100 kHz to 300 kHz)	900 μ V/V		
408	A	T		(300 kHz to 1 MHz)	4.5 mV/V		
				(2 V to 5 V)			
409	A	T		[40 Hz to 100 kHz]	4.8 mV/V		
410	A	T		(100 kHz to 300 kHz)	1.7 mV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
411	A	T			(300 kHz to 1 MHz]	7.8 mV/V		
					(5 V to 10 V]			
412	A	T			[40 Hz to 100 kHz]	0.38 mV/V		
413	A	T			(100 kHz to 300 kHz]	1 mV/V		
414	A	T			(300 kHz to 1 MHz]	5.2 mV/V		
					(10 V to 20 V]			
415	A	T			[40 Hz to 100 kHz]	350 μV/V		
416	A	T			(100 kHz to 300 kHz]	840 μV/V		
417	A	T			(300 kHz to 1 MHz]	4.4 mV/V		
					(20 V to 50 V]			
418	A	T			[40 Hz to 30 kHz]	330 μV/V		
419	A	T			(30 kHz to 100 kHz]	920 μV/V		
					(50 V to 100 V]			
420	A	T			[40 Hz to 30 kHz]	210 μV/V		
421	A	T			(30 kHz to 100 kHz]	870 μV/V		
					(100 V to 200 V]			
422	A	T			[40 Hz to 30 kHz]	180 μV/V		
423	A	T			(30 kHz to 100 kHz]	860 μV/V		
					(200 V to 500 V]			
424	A	T			40 Hz to 33 kHz	370 μV/V		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
425	A	T		(500 V to 1000 V] 40 Hz to 33 kHz	300 μ V/V		
426	A	P	AC Current Measuring Instruments זרם חילופין מכשירי מדידה	1 mA	240 μ A/A	Manufacturer instructions SOP 10574	AVMS Datron 4920, Shunt Adapter Datron 4921, Shunt adapter Rafael 4921R, Current Shunt A40, A40A, Datron Calibrator 4808, Datron 4600, Datron 9100, Current coils
427	A	P		300 Hz	240 μ A/A		
428	A	P		1 kHz	240 μ A/A		
429	A	P		5 kHz	240 μ A/A		
430	A	P		10 mA	235 μ A/A		
431	A	P		300 Hz	235 μ A/A		
432	A	P		1 kHz	235 μ A/A		
433	A	P		5 kHz	235 μ A/A		
434	A	P		100 mA	235 μ A/A		
435	A	P		300 Hz	245 μ A/A		
436	A	P		1 kHz	245 μ A/A		
437	A	P		5 kHz	245 μ A/A		
438	A	P		10 A	360 μ A/A		
439	A	P		300 kHz	360 μ A/A		
				1 kHz	360 μ A/A		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
440	A	P		5 kHz [1 mA to 2 mA]	360 μ A/A		
441	A	P		[10 Hz to 1 kHz]	240 μ A/A		
442	A	P		(1 kHz to 5 kHz)	250 μ A/A		
				(2 mA to 5 mA)			
443	A	P		[10 Hz to 1 kHz]	370 μ A/A		
444	A	P		(1 kHz to 5 kHz)	400 μ A/A		
				(5 mA to 20 mA)			
445	A	P		[10 Hz to 1 kHz]	255 μ A/A		
446	A	P		(1 kHz to 5 kHz)	280 μ A/A		
				(20 mA to 50 mA)			
447	A	P		[10 Hz to 1 kHz]	380 μ A/A		
448	A	P		(1 kHz to 5 kHz)	410 μ A/A		
				(50 mA to 200 mA)			
449	A	P		[10 Hz to 1 kHz]	260 μ A/A		
450	A	P		(1 kHz to 5 kHz)	285 μ A/A		
				(200 mA to 500 mA)			
451	A	P		[10 Hz to 1 kHz]	490 μ A/A		
452	A	P		(1 kHz to 5 kHz)	660 μ A/A		
				(500 mA to 2 A)			
453	A	P		[10 Hz to 1 kHz]	360 μ A/A		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
454	A	P		(1 kHz to 5 kHz]	485 μ A/A		
455	A	P		(2 A to 11 A]			
456	A	P		[10 Hz to 1 kHz]	400 μ A/A		
457	A	P		(1 kHz to 5 kHz]	460 μ A/A		
458	A	P		(11 A to 20 A]			
459	A	P		[10 Hz to 3 kHz]	2.1 mA/A		
460	A	P		(3 kHz to 5 kHz]	6 mA/A		
461	A	P		(20 A to 200 A]			
462	A	T		[10 Hz to 100 Hz]	2.6 mA/A		
463	A	T		(100 Hz to 440 Hz]	8 mA/A		
464	A	T		(200 A to 1000 A]		Manufacturer instructions SOP 10700	Fluke 5730A Datron 4600 Datron 9100 Current coils
465	A	T		[10 to 100 Hz]	4 mA/A		
466	A	T		[1 mA to 2 mA]			
467	A	T		[10 Hz to 1 kHz]	620 μ A/A		
468	A	T		(1 kHz to 5 kHz]	720 μ A/A		
469	A	T		(2 mA to 5 mA]			
470	A	T		[10 kHz to 1 kHz]	1.3 mA/A		
471	A	T		(1 kHz to 5 kHz]	1.4 mA/A		
472	A	T		(5 mA to 20 mA]			
473	A	T		[10 Hz to 1 kHz]	0.8 mA/A		
474	A	T		(1 kHz to 5 kHz]	0.9 mA/A		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
468	A	T		(20 mA to 50 mA] [10 Hz to 1 kHz]	1.3 mA/A		
469	A	T		(1 kHz to 5 kHz]	1.4 mA/A		
470	A	T		(50 mA to 200 mA] [10 Hz to 1 kHz]	0.8 mA/A		
471	A	T		(1 kHz to 5 kHz]	0.9 mA/A		
472	A	T		(200 mA to 500 mA] [10 Hz to 1 kHz]	1.5 mA/A		
473	A	T		(1 kHz to 5 kHz]	1.7 mA/A		
474	A	T		(500 mA to 2 A] [10 Hz to 1 kHz]	0.96 mA/A		
475	A	T		(1 kHz to 5 kHz]	1.3 mA/A		
476	A	T		(2 A to 11 A] [10 Hz to 1 kHz]	0.86 mA/A		
477	A	T		(1 kHz to 5 kHz]	1.6 mA/A		
478	A	T		(11 A to 20 A] [10 Hz to 3 kHz]	2.1 mA/A		
479	A	T		(3 kHz to 5 kHz]	6.0 mA/A		
480	A	T		(20 A to 200 A] [10 Hz to 100 kHz]	2.6 mA/A		
481	A	T		(100 Hz to 440 Hz]	8.0 mA/A		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
482	A	T		(200 A to 1000 A) [10 Hz to 100 Hz]	4 mA/A		
483	A	P	AC Current Sources	1 mA 300 Hz	240 μ A/A	Manufacturer instructions SOP 10570	Alternating Voltage Measurement, Datron 4920, Shunt Adapter Datron 4921, Shunt Adapter Rafael 4921R, Current Shunt A40, A40A, Wavetek MTS 4950, Datron Calibrator 4808, Datron 4600, Datron 9100, Current Clamp, Current coils
484	A	P		1 kHz	240 μ A/A	SOP 10576	
485	A	P		5 kHz	240 μ A/A	SOP 10650	
486	A	P		10 mA 300 Hz	240 μ A/A		
487	A	P		1 kHz	240 μ A/A		
488	A	P		5 kHz	240 μ A/A		
489	A	P		100 mA 300 Hz	240 μ A/A		
490	A	P		1 kHz	240 μ A/A		
491	A	P		5 kHz	240 μ A/A		
492	A	P		1 A 300 Hz	240 μ A/A		
493	A	P		1 kHz	240 μ A/A		
494	A	P		5 kHz	240 μ A/A		
495	A	P		10 A 300 Hz	350 μ A/A		
496	A	P		1 kHz	350 μ A/A		



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Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
497	A	P		5 kHz [1 mA to 2 mA]	350 μ A/A		
498	A	P		[10 Hz to 49 Hz]	240 μ A/A		
499	A	P		[51 Hz to 1 kHz]	240 μ A/A		
500	A	P		(49 Hz to 51 Hz)	490 μ A/A		
				(2 mA to 5 mA)			
501	A	P		[10 Hz to 49 Hz]	380 μ A/A		
502	A	P		[51 Hz to 1 kHz]	400 μ A/A		
503	A	P		(49 Hz to 51 Hz)	510 μ A/A		
				(5 mA to 20 mA)			
504	A	P		[10 Hz to 49 Hz]	260 μ A/A		
505	A	P		[51 Hz to 1 kHz]	260 μ A/A		
506	A	P		(49 Hz to 51 Hz)	310 μ A/A		
				(20 mA to 50 mA)			
507	A	P		[10 Hz to 1 kHz]	420 μ A/A		
508	A	P		(1 kHz to 5 kHz)	425 μ A/A		
				(50 mA to 200 mA)			
509	A	P		[10 Hz to 1 kHz]	270 μ A/A		
510	A	P		(1 kHz to 5 kHz)	290 μ A/A		
				(200 mA to 500 mA)			
511	A	P		[10 Hz to 1 kHz]	500 μ A/A		



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
512	A	P			(1 kHz to 5 kHz]	670 μA/A		
					(500 mA to 2 A]			
513	A	P			[10 Hz to 1 kHz]	370 μA/A		
514	A	P			(1 kHz to 5 kHz]	490 μA/A		
					(2 A to 11 A]			
515	A	P			[10 Hz to 1 kHz]	400 μA/A		
516	A	P			(1 kHz to 5 kHz]	460 μA/A		
					(11 A to 20 A]			
517	A	P			[10 Hz to 3 kHz]	2.1 mA/A		
518	A	P			(3 kHz to 5 kHz]	6.0 mA/A		
					(20 A to 200 A]			
519	A	P			[10 Hz to 100 Hz]	2.6 mA/A		
520	A	P	(100 Hz to 440 Hz]	8.0 mA/A				
			(200 A to 1000 A]					
521	A	P			[10 to 100 Hz]	4.0 mA/A		
522	A	P	AC Resistance, Measuring Instruments	התנגדות זרם חילופין, מכשירי מדידה	10 Ω	1.5 mΩ/Ω	Manufacturer instructions SOP 10980	HP AC Resistors
					100 kHz			
523	A	P			100 Ω			
					100 kHz			
524	A	P			1 kΩ			
				100 kHz	2.3 mΩ/Ω			
525	A	P			10 kΩ			
					100 kHz	2.3 mΩ/Ω		



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Calibration – Electrical Quantities - DC and LF							כיוול – גדלים חשמליים - זרם ישיר ותדר נמוך		
526	A	P			100 kΩ		3.5 mΩ/Ω		
					100 kHz				
527	A	P			10 Ω				
					1 MHz				
528	A	P			100 Ω				
					1 MHz				
529	A	P			1 kΩ				
					1 MHz				
530	A	P			10 kΩ				
					1 MHz				
531	A	P	10 Ω			2.3 mΩ/Ω			
			10 MHz			2.1 mΩ/Ω			
532	A	P	100 Ω			3.5 mΩ/Ω			
			10 MHz			3.5 mΩ/Ω			
533	A	P	1 kΩ			3.5 mΩ/Ω			
			10 MHz			3.5 mΩ/Ω			
534	A	P	AC Resistance, Resistors	התנגדות זרם חילופין, מחוללים	10 Ω		1.5 mΩ/Ω	Manufacturer instructions SOP 10985	LCR HP AC Resistors
					100 kHz				
535	A	P			100 Ω				
					100 kHz				
536	A	P			1 kΩ				
					100 kHz				
537	A	P			10 kΩ				
					100 kHz				
538	A	P	100 kΩ			2.3 mΩ/Ω			
			100 kHz			3.5 mΩ/Ω			



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities - DC and LF					כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
539	A	P	Capacitance, Measuring Instruments קיבול, מכשירי מדידה	10 nF		Manufacturer instructions SOP 10980	HP Standard Capacitors GR standard Capacitors
540	A	P		120 Hz	0.4 mF/F		
541	A	P		1 kHz	0.4 mF/F		
542	A	P		10 kHz	0.6 mF/F		
				100 kHz	1.6 mF/F		
				100 nF			
543	A	P		120 Hz	0.4 mF/F		
544	A	P		1 kHz	0.3 mF/F		
545	A	P		10 kHz	1 mF/F		
546	A	P		100 kHz	3 mF/F		
				1 μF			
547	A	P		120 Hz	0.6 mF/F		
548	A	P		1 kHz	0.3 mF/F		
549	A	P		10 kHz	0.8 mF/F		
				1 pF			
550	A	P		1 kHz	2 mF/F		
551	A	P		1 MHz	4 mF/F		
552	A	P		10 MHz	13 mF/F		
553	A	P		13 MHz	13 mF/F		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks	
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
554	A	P			10 pF	0.3 mF/F			
555	A	P			1 kHz				0.8 mF/F
556	A	P			1 MHz				
557	A	P			10 MHz				
558	A	P			13 MHz	2.5 mF/F			
559	A	P			100 pF	0.6 mF/F			
560	A	P			1 kHz				
561	A	P			1 MHz				
562	A	P			10 MHz				
563	A	P			13 MHz	2 mF/F			
564	A	P			1000 pF	0.3 mF/F			
565	A	P			1 kHz				
566	A	P			1 MHz				
567	A	P			10 MHz				
568	A	P			13 MHz	0.5 mF/F			
569	A	P			10 nF	0.4 mF/F			
570	A	P	120 Hz						
571	A	P	1 kHz						
572	A	P	10 kHz						
573	A	P	100 kHz	0.6 mF/F					
574	A	P			1.6 mF/F	Manufacturer instructions SOP 10985	LCR HP Standard Capacitors GR Capacitors		

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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך			
570	A	P			100 nF				
571	A	P			120 Hz				0.4 mF/F
572	A	P			1 kHz				0.3 mF/F
573	A	P			10 kHz				1 mF/F
574	A	P			100 kHz				3 mF/F
575	A	P			1 μF				0.6 mF/F
576	A	P			120 Hz				
577	A	P			1 kHz				
578	A	P			10 kHz				
579	A	P			1 pF				0.3 mF/F
580	A	P			1 kHz				
					10 pF				
					1 kHz				
					100 pF				0.6 mF/F
					1 kHz				
					1000 pF				
			1 kHz	0.3 mF/F					
581	A	P	Inductance, Measuring Instruments	השראות, מכשירי מדידה	100 μH		Manufacturer instructions SOP 10980	GR Inductors	
582	A	P			1 kHz				0.7 mH/H
583	A	P			1 mH				0.3 mH/H
					1 kHz				0.4 mH/H
584	A	P			10 mH				0.3 mH/H
					1 kHz				
					100 mH				
					1 kHz				



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks				
Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך						
585	A	P			1 H 1 kHz	0.6 mH/H						
586	A	P			10 H 400 Hz	0.5 mH/H						
587	A	P	Inductance, Inductors	השראות, משרנים	100 μH 1 kHz	0.7 mH/H	Manufacturer instructions SOP 10985	LCR GR Tech Inductors				
588	A	P			1 mH 1 kHz	0.3 mH/H						
589	A	P			10 mH 1 kHz	0.4mH/H						
590	A	P			100 mH 1 kHz	0.4 mH/H						
591	A	P			1 H 1 kHz	0.7 mH/H						
592	A	P			10 H 400 Hz	0.5 mH/H						
593	A	P			Frequency, Sources	תדר, מחוללים			100 kHz	10 ⁻¹¹ for 3 hours	Manufacturer instructions SOP 10907	Oscillator HP 105B Comparator Fluke 103A GPS HP 58503A
594	A	P							1 MHz	10 ⁻¹¹ for 3 hours		
595	A	P	5 MHz	10 ⁻¹¹ for 3 hours								
596	A	P	10 MHz	10 ⁻¹¹ for 3 hours								
597	A	P;T	[1 Hz to 10 kHz]	10 μHz for 1 s								
598	A	P;T	(10 kHz to 30 MHz]	10 ⁻⁹ for 1 s								
599	A	P;T	(30 MHz to 80 MHz]	10 ⁻¹¹ Hz for 1 s								



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Calibration – Electrical Quantities - DC and LF						כיוול – גדלים חשמליים - זרם ישר ותדר נמוך		
600	A	P	AC charge amplification. Charge amplifiers	הגברת מטען חשמלי. מגברי מטען	40 Hz – 10 kHz Minimum input 10 pC RMS Maximum output 1 V RMS	0.2 %	Manufacturer instructions SOP 11300	Calibration of voltage output per charge input

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Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities – HF Electrical Power and Energy						כיוול – גדלים חשמליים - הספק ואנרגייה חשמלית בתדר גבוה		
616	A	P;T	Power, Sources	הספק, מקורות	[10 MHz to 18 GHz]	50 mW/W	Manufacturer instructions SOP 10925	Reference Power Sensor
617	A	P;T			(18 GHz to 40 GHz]	51 mW/W		Reference Power Meter (1mwatt)
618	A	P;T			(40 GHz to 50 GHz]	65 mW/W		
619	A	P;T	Power, Power Sensors Cal Factor	הספק, מקדם כיוול רגשי הספק	[100 MHz to 8 GHz]	20 mW/W	Manufacturer instructions SOP 10945 Manufacturer instructions	Reference Power Sensor
620	A	P;T			(8 GHz to 32 GHz]	30 mW/W		
621	A	P;T			(32 GHz to 43 GHz]	35 mW/W		
622	A	P;T			(43 GHz to 50 GHz]	42 mW/W		
623	A	P;T	Power Power Meter 1 mW output	הספק, מדי הספק, יציאה 1 mW	50 MHz	5.4 mW/W	SOP 10923	Reference Power Sensor
624	A	P;T	Attenuation, Attenuators	הנחתה מנחתים	[0.1 GHz to 2 GHz]		Manufacturer instructions SOP 10928	436A-E40 Microwave Power Sensor System HP 8350B Sweep Generator HP 436A Power Meter HP 8481A, 8484 Power References Sensors
					[0 dB to 15 dB]	0.04 dB		
625	A	P;T			(15 dB to 35 dB]	0.09 dB		
626	A	P;T			(35 dB to 60 dB]	0.12 dB		
					(2 GHz to 6 GHz]			
627	A	P;T			[0 to 15 dB]	0.06 dB		
628	A	P;T			(15 to 35 dB]	0.12 dB		
629	A	P;T			(35 to 60 dB]	0.21 dB		
					(6 GHz to 14 GHz]			
630	A	P;T			[0 dB to 15 dB]	0.08 dB		
631	A	P;T			(15 dB to 35 dB]	0.19 dB		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Electrical Quantities – HF Electrical Power and Energy					כיוול – גדלים חשמליים - הספק ואנרגיה חשמלית בתדר גבוה		
632	A	P;T		(35 dB to 60 dB) (14 GHz to 18 GHz]	0.21 dB		
633	A	P;T		[0 dB to 15 dB]	0.1 dB		
634	A	P;T		(15 dB to 35 dB]	0.13 dB		
635	A	P;T		(35 dB to 60 dB]	0.23 dB		
636	A	P;T	Amplitude Modulation (AM), Depth of Signals אפנון משרעת, עומק אפנון	Carrier frequency: [sine 100 Hz to 50 GHz] Modulation frequency: [1 Hz to 250 kHz sine and square] Modulation depth: [5% to 95%] Ratio: Carrier/Rate [10 to 50·10 ⁹]	1 %	Manufacturer instructions SOP 10962	Agilent PSA spectrum Analyzer, model E4448A

Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities – Accelerometers					כיוול – גדלים מכניים – מדי תאוצה		
637	A	P	Acceleration Piezoelectric type accelerometer מד תאוצה פייזואלקטרי	[5 m/s ² to 100 m/s ²] [2 Hz to 100 Hz]	1.5 %	ISO 16063-21 SOP 10040	Endevco CAACS (Commercial Automated Accelerometer Calibration system)
638	A	P		(100 Hz – 2.5 kHz]	1.2 %		
639	A	P		(2.5 kHz to 10 kHz]	2.5 %		
640	A	P	Acceleration Piezoresistive type accelerometer מד תאוצה פייזורזיסטיבי	[5 m/s ² to 100 m/s ²] [2 Hz to 100 Hz]	1.5 %	ISO 16063-21 SOP 10040	Endevco CAACS (Commercial Automated Accelerometer Calibration system)
641	A	P		(100 Hz – 2.5 kHz]	1.2 %		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities – Accelerometers						כיוול – גדלים מכניים – מדי תאוצה		
642	A	P			(2.5 kHz to 10 kHz]	2.5 %		
643	A	P	Acceleration Piezoelectric type accelerometer	מד תאוצה	[200 m/s ² to 10 000 m/s ²]	1.9 %	ISO 16063-22	Endevco Comparison Shock Calibrator Model 2925
644	A	P	Shock Calibration	כיוול הלם	(10 000 m/s ² to 100 000 m/s ²]	4.0 %	SOP 10040	

Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities – CMM Measuring Machines						כיוול – גדלים מכניים – מכשירי מדידה תלת ממדיים		
645	A	P,T	Length, CMM Measuring Machine	אורך, מכונת מדידה תלת ממדיות	20 mm to 2000 mm	[0.2 µm + 2·L] µm	ISO 10360-2 ISO 10360-5 SOP 10025	L in meters Check Master Accurate Ball Gauge
646	A	P,T			125 mm to 1000 mm	[0.16 µm + 1.2·L] µm	ISO 10360-2 SOP 10025	Gauge Blocks



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities – Form, Angle					כיוול – גדלים מכניים – צורה, זווית		
647	A	P	Form, Flatness, צורה, שטחיות, מישור אופטי	Up to 0.6 μm	0.09 μm	A-A-58051	For optical flats with a diameter up to 100 mm
648	A	P	Optical Flats	(0.6 μm to 1.2 μm)	0.12 μm	JIS B 7430 Manufacturer instructions SOP 9150104	For surfaces with a diameter up to 100 mm
649	A	P,T	Form, Flatness, Surface Plates צורה, שטחיות, לוחות שטוחים	Up to 2 mm	2.1 μm	DIN 876 parts 1 and 2 BS 817 ASME B89.3.7 ISO 8512-part 2 SOP 10032	Electronic Levels L in meters diagonal Granite, Cast Iron For surfaces up to 2000 mm in diagonal
650	A	P	Form, Straightness Straightedges צורה, ישרות, סרגל ישרות	Up to 500 mm	3 μm	DIN 874 part 2 SOP 9150114	Surface plate, electronic gauge head
651	A	P	Form, Straightness, Knife edge צורה, ישרות, סרגל שורה	Up to 500 mm	0.8 μm	DIN 874 part 2 SOP 9150121	Surface plate, electronic gauge head, Square Block
652	A	P	Squareness, Block square ניצבות זוויתן ברך	Up to 0.02 mm	1.1 μm	BS 939 DIN 875	Surface plate, electronic head, straightedges
653	A	P	Base Parallelism מקבילות הבסיס	Up to 200 mm	1.0 μm	JIS B 7526	for Block Squares up to 500 mm
654	A	P		(200 to 500 mm]	1.4 μm	Manufacturer instructions SOP 9150113	
655	A	P	Squareness Squareness gauge ניצבות מד ניצבות	Up to 500 mm	3.5 μm	Manufacturer instructions SOP 9150126	Square master
656	A	P	Parallelism, Parallels, Steel and Granite מקבילות, מקבילי פלדה וגרניט	Up to 400 mm	1.1 μm	DIN 6346 GGG-P-61 BS 906 part 1 and 2 SOP 9150122	Surface plate, electronic head



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities – Form, Angle					כיוול – גדלים מכניים – צורה, זווית		
657	A	P	Angle, Vee Blocks Squareness, Flatness and Parallelism	זווית, פרזומה V Up to 200 mm	1.0 μ m	DIN 2274 BS 3731 A-A-51150B SOP 9150117	Accurate cylinders, surface plate, electronic head
658	A	P	Bevel Protractor Angle	מד זווית, זווית, 1.1 '	360°	BS 1685 A-A-3084 SOP 9150114	Angular block gauges
659	A	P	Straightness, parallelism	ישרות, מקבילות 2.5 μ m			
660	A	P	Angle, Levels, spirit	זווית, פלס Up to 0.02 mm/m	1.4 "	DIN 877 BS 958 MIL-V-3144B SOP 9150118	Rotary table
661	A	P	Angle, Rotary table	זווית, שולחן מסתובב Up to 360°	0.5 "	Manufacturer instructions SOP 9150130	Autocollimator, polygon
662	A	P	Angle, Electronic levels	זווית, פלס אלקטרוני Up to 400"	1.4 "	DIN 877 BS 958	Rotary table
663	A	P	Angle, Digital Levels	זווית, פלס אלקטרוני פלס דיגיטלי Up to 360°	3.5 ' 1.1 '	MIL-V-3144B Manufacturer instructions SOP 9150118	Indication 0.1° Indication 0.01°
664	A	P	Sine Bar	סרגל סינוס 0° - 45°	6.3 "	BS 3064 SOP 9150119	Gauge blocks, angle gauge blocks
665	A	P	Parallelism of roll axes	מקבילות בין צירי הגליל Up to 200 mm	0.7 μ m		
666	A	P	Flatness of working surface	שטחיות משטח עבודה Up to 200 mm	0.8 μ m		
667	A	P	Parallelism of working surface to reference plane	מקבילות בין משטחי עבודה למישור הייחוס Up to 200 mm	0.8 μ m		
668	A	P	Distance between roll axes	מרחק בין צירי הגלילים Up to 200 mm	3.8 μ m	SOP 9150119	



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities – Form, Angle						כיוול – גדלים מכניים – צורה, זווית		
669	A	P	Inclinometer	מד שיפוע	45 °	3.1 "	Manufacturer instructions SOP 10027	Rotary table, DVM
670	A	P	Revolution per minute	מהירות סיבוב,	[100 to 500] RPM	0.6 % O.R.	Manufacturer instructions	Counter
671	A	P	Contact Tachometers	מד מהירות סיבוב במגע	(500 to 10000) RPM	0.0 3% O.R.	SOP 10044	OR –of reading
672	A	P	Revolution per minute	מהירות סיבוב,	[5 to 10,000] RPM	0.05 % O.R.	Manufacturer instructions	Counter
673	A	P	Optical Tachometers	מד מהירות סיבוב אופטי	(10,000 to 100,000) RPM	0.02 % O.R.	SOP 10044	OR –of reading

Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Hardness Meters						כיוול – גדלים מכניים - מדי קושיות		
674	A	P,T	Rockwell hardness scale, Rockwell hardness testing machines	קשיות רוקוול, מכונות לבדיקת קשיות רוקוול	HRA		ASTM E-18 SOP 10018	Indirect verification, i.e. Calibration by comparison to reference materials.
675	A	P,T			[20 to 84]	0.4 HRA		
					HRC			
					[20 to 65]	0.4 HRC		
676	A	P,T			HRBW			
					[40 to 100]	1.0 HRBW		
677	A	P,T			HREW			
					[70 to 100]	0.55 HREW		
678	A	P,T	HRFW					
			[60 to 100]	0.5 HRFW				
679	A	P,T	HR15N					
			[70 to 92]	0.5 HR15N				
680	A	P,T	HR30N					
			[42 to 82]	0.5 HR30N				



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Hardness Meters						כיוול – גדלים מכניים - מדי קושיות		
681	A	P,T			HR15TW [74 to 93]	0.4 HR15TW		
682	A	P,T			HR30TW [43 to 83]	0.7 HR30TW		
683	A	P	Shore hardness testing instruments - durometers. SHORE A	מכשירים למדידת קשיות בשיטת שור - דורמטרים. שור A	[0 to 100] Shore A	0.5 SHORE A	ASTM D-2240 ISO 48-9 SOP 10028	Balance and device for durometer calibration CNC (MicroVu)
684	A	P	Indenter extension	אורך החודרן	[2.46 to 2.54] mm	0.045 mm		
685	A	P	Indenter diameter	קוטר החודרן	[0.76 to 0.82] mm	0.002 mm		
686	A	P			[1.1 to 1.4] mm	0.002 mm		
687	A	P	Indenter angle	זווית החודרן	[34.75° to 35.25°]	0.011 °		
688	A	P	Shore hardness testing instruments - durometers. SHORE D	מכשירים למדידת קשיות בשיטת שור - דורמטרים. שור D	[10 to 100] Shore D	0.3 SHORE D	ASTM D-2240 ISO 18898 SOP 10028	Balance and device for durometer calibration CNC (MicroVu)
689	A	P	Indenter extension	אורך החודרן	[2.46 to 2.54] mm	0.045 mm		
690	A	P	Indenter diameter	קוטר החודרן	[1.1 to 1.4] mm	0.002 mm		
691	A	P	Indenter radius	רדיוס החודרן	[0.088 to 0.112] mm	0.002 mm		
692	A	P	Indenter angle	זווית החודרן	[29.5° to 30.5°]	0.011 °		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length					כיוול – גדלים מכניים - אורך		
693	A	P	Length, Gauge Blocks (by Comparison)	אורך, מקבילונים [0.5 mm to 10 mm]	#A ##B 0.085 μm 0.15 μm	SOP 9150112 Based on	Gauge Block Comparator # Class A uncertainties apply to the measurement of length of gauges by comparison with grade K standards of a similar material
694	A	P		(10 mm to 25 mm]	0.11 μm 0.18 μm	DIN 861	
695	A	P		(25 mm to 60 mm]	0.14 μm 0.22 μm	JIS B 7506 BS 4311	
696	A	P		(60 mm to 90 mm]	0.19 μm 0.27 μm	ISO 3650	
697	A	P		(90 mm to 100 mm]	0.25 μm 0.34 μm		## Class B uncertainties apply to the measurement of length of gauges by comparison with grade 0 standards of a similar material
698	A	P		[125 mm up to 1000 mm]	0.5 μm		ULM 1500 for gauge blocks above 125 mm
699	A	P	Length, Gauge Blocks Comparators	אורך, קומפרטור למקבילונים [0.5 mm to 100 mm]	0.05 μm	SOP 10053 Based on EURAMET/cg-02	Set of 6 pairs of gauge blocks including 6 mm bridge shaped gauge block Grade K gauge blocks



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length						כיוול – גדלים מכניים - אורך		
700	A	P	Length,	אורך,	[25 mm to 600 mm]	0.5 μm	GGG-C-105-1987	Gauge block,
701	A	P	Micrometer extension rod	מוטות הארכה למיקרומטר	(25 mm to 1000 mm)	(1 μm + 1.2·L) μm	DIN 861-1980 SOP 9150127	Measuring machines L in meters
702	A	P	Diameter,	קוטר,	[1.5 mm to 90 mm]	0.3 μm	SOP 9150123	Setting rings
703	A	P	Plain Ring Gauges, parallel	מדידי טבעת חלקה	(90 mm to 300 mm)	0.4 μm	Based on ASME B89.1.6	Measuring machines
704	A	P	Diameter,	אורך, (קוטר)	[0.7 mm to 25 mm]	1.0 μm	SOP 10050	Gauge Blocks
705	A	P	Plain Plug Gauges	מדידי תקע חלק	(25 mm to 200 mm)	1.0 μm	Based on MIL-STD-120 DIN 7164 ASME B1.1, ASME B1.2	Measuring machines
706	A	P	Diameter, Measuring Pins	אורך (קוטר), מדידי קדח	[0.7 mm to 25.4 mm]	0.8 μm	MIL-STD-120 DIN 2269 SOP 10050	Gauge Blocks Measuring machines
707	A	P	Diameter, Pitch. Thread Measuring Wires,	קוטר, תיילים למדידת הברגה	[0.1155 mm to 5.7735 mm]	0.3 μm	ASME B89.6 SOP 10048	Measuring machine
708	A	P	Diameter, Pitch. Thread Plug Gauges, Parallel	קוטר, מדידי הברגה זכר מקביל	[0.8mm to 300 mm]	1.6 μm	ISO 228/1/2 ISO 1502 ISO 2903 ISO 2904 BS 84 BS 919/1/3 409/1/2 ASMEB1.2 ASME B1.1 ASME B1.9 SOP 9150124	Gauge Blocks Measuring machine



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length					כיוול – גדלים מכניים - אורך		
709	A	P	Diameter, Pitch. Thread Plug Gauges, Taper	קוטר אפקטיבי, מדידי הברגה זכר, קוני [0.8 mm to 77 mm]	3.9 μ m	SOP 9150124	
710	A	P	Diameter, Pitch Thread Ring gauges Parallel	קוטר אפקטיבי, מדידי הברגה טבעת, מקביל [5 mm to 200 mm]	1.8 μ m	ISO 228/1/2 ISO 1502 ISO 2903 ISO 2904 BS 84 BS 919/1/2/3 ASME B1.1, ASME B1.2 ASME B1.9 SOP 9150128	Functional Inspection (GO-NOT GO) in the range up to 25.4 mm may be provided Wear and setting plugs Measuring machine, gauge blocks
711	A	P	Diameter, Internal Dial Bore Gauge, Built in	קוטר פנימי, מד קדח, חוגן מובנה, אינטרטסט Up to 150 mm	8.4 μ m	Manufacturer instructions JIS 7515 SOP 10014	Measuring machine Indicator Tester
712	A	P	Diameter, Internal, Dial bore gauge	קוטר פנימי, מד קדח גשר [4 mm to 400 mm]	0.9 μ m	Manufacturer instructions SOP 9150111	Electronic Gauge
713	A	P	Diameter, Internal, Dial bore gauge, Split Pin	קוטר פנימי, מד קדח פין מפציל [0.5 mm up to 41.3 mm]	2.0 μ m	SOP 9150110	Outside micrometer, gauge blocks
714	A	P	Length, Vernier, Dial and Digital Caliper	אורך, זחון וורניר, חוגן ודיגיטלי Up to 2000 mm]	(10 μ m + 5·L) μ m	JIS B 7507 DIN 862 BS 887 SOP 9150105	Check master; length bars, gauge blocks L in meters
715	A	P;T	Length, Height Gauge	אורך, מד גובה Up to 1000 mm]	3 μ m	JIS B 7517 BS 1643 SOP 10051	Check master; length bars, gauge blocks, indicator tester. CMC values stand for instruments that have resolution of 0.0001 mm



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length					כיוול – גדלים מכניים - אורך		
716	A	P	Length, Micrometer External אורך, מיקרומטר חיצוני	[Up to 400 mm]	$(1.6 \mu\text{m} + 5.5 \cdot L) \mu\text{m}$	JIS B 7502 JIS B 7520	Gauge blocks, micrometer setting rods L in meters
717	A	P		[400 mm to 1000 mm]	$(3 \mu\text{m} + 1.1 \cdot L) \mu\text{m}$	DIN 863 part 1 BS 870 SOP 10052	
718	A	P	Length, Micrometer Head אורך, ראש מיקרומטר	Up to 50 mm]	1.1 μm	JIS B 7504 BS 1734 DIN 863 part 2 SOP 10021	Gauge blocks, electronical gauge head L in meters
719	A	P	Length, Micrometer Depth אורך, מיקרומטר עומק	Up to 300 mm]	$(2 \mu\text{m} + 10 \cdot L) \mu\text{m}$	JIS B 7504 DIN 863 part 2 BS 1734 SOP 9150106	Gauge Blocks L in meters
720	A	P	Diameter, Internal Three point internal micrometer קוטר פנימי, מיקרומטר פנימי 3 נקודות	Up to 90 mm]	1.6 μm	DIN 863 part 4 SOP 9150129	Plain ring gauges
721	A	P		(90 mm to 200 mm]	1.8 μm		
722	A	P	Length, Inside micrometer אורך מיקרומטר פנימי	Up to 75 mm]	1.8 μm	DIN 863 SOP 10023	Gauge blocks, Gauge blocks accessories
723	A	P	Length, Dial Gauge, lever אורך, חוגן מנופי	Up to 0.8 mm]	0.8 μm	JIS B 7509 DIN 879 part 1 BS 907	Indication 0.001 mm
724	A	P		Up to 0.2 mm	1 μm	JIS B 7533 BS 2795 JIS B 7503	Indication 0.002 mm
725	A	P		(0.8 mm to 3 mm]	1 μm	DIN 878- DIN 2270	Indication 0.01 mm



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length						כיוול – גדלים מכניים - אורך		
							SOP 9150103	
726	A	P	Length, Dial indicator	אורך, חוון	Up to 0.05 mm	0.4 μm	JIS B 7509 DIN 879 part 1	Indication 0.005 mm
727	A	P			Up to 5 mm	0.42 μm	BS 907	Indication 0.001 mm
728	A	P			Up to 100 mm]	1 μm	JIS B 7533 BS 2795	Indication 0.01 mm
729	A	P			(100 mm to 150 mm]	(0.85 μm + 5.5·L) μm	DIN 2270 DIN 878 JIS B 7503 SOP 9150107	Indicator Tester L in meters
730	A	P	Length, Indicator Tester	אורך, בודק חוננים	Up to 25 mm	0.5 μm	Manufacturer instructions SOP 9150134	Indication 0.001 mm Gauge blocks
731	A	P	Length, LVDT	אורך, מתמר אורך	Up to 50 mm	27 μm	Manufacturer instructions SOP 10022	Indicator Tester DVM
732	A	P	Length Electronic probe	אורך גשש אלקטרוני	Up to 60 mm	0.12 μm		Gauge blocks
733	A	P	Length, Height Gauge Micrometric	אורך, מד גובה מיקרומטרי	Up to 300 mm	3 μm	Manufacturer instructions SOP 9150109	Gauge blocks, electronical gauge head
734	A	P	Length, Horizontal Measuring Machine	אורך, מכונת מדידה	Up to 1000 mm	(0.1 μm + 0.4·L) μm	Manufacturer instructions SOP 10029	Indication 0.00001 mm Measuring machine range up to 1000 mm L in meter
735	A	P	Length, Sieves	אורך, נפות אריג	Up to aperture of 4.75 mm	1.5 μm	ASTM – E11 ISO 3310-1 SOP 10054	MicroVu
736	A	P	Length, Feeler gauge	אורך, מד מרווח	Up to 1 mm	0.5 μm	JIS B 7524 DIN 2275	Certo



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length						כיול – גדלים מכניים - אורך		
							SOP 10055	
737	A	T	Profile projector, Magnification	מטול אופטי, הגדלה	Up to 100 M	0.0092%	Manufacturer instructions JIS B 7184 SOP 10026	Glass scale M - Magnification Screen sizes up to 300 mm
738	A	T	Profile projector, Axis accuracy	מטול אופטי, דיוק צירים	Up to 300 mm	2 µm		Glass scale
739	A	T	Profile projector, Angle accuracy	מטול אופטי, דיוק זוויתי	1" to 90°	1.1 '		Angle block gauges
740	A	P,T	CNC, video measuring sytem, length measurement		Up to 300 mm	1 µm		Glass scale
741	A	P,T	CNC, video measuring sytem, angle measurement		Up to 90°	0.002°		Angle block gauges
Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Force, Torque						כיול – גדלים פיזיקליים - כח, מומנט		
742	A	P	Force, Dynamometers	כוח,מדי כוח	[0.5 N to 1961 N]	0.008% OR + 0.05 N	SOP 9015031 Manufacturer instructions	Weights
743	A	P	Force, Load cell	כוח, תא עומס	(210 N to 3130 N]	3.3 N	ISO 7500-1 SOP 90150318	Weights, proving rings, load cells
744	A	P			(3130 N to 6410 N]	4.7 N		
745	A	P			(6410 N to 9700 N]	7.1 N		
746	A	P			(9.7 kN to 12.9 kN]	9.5 N		
747	A	P			(12.9 kN to 17.6 kN]	13.8 N		
748	A	P			(17.6 kN to 18.8 kN]	15 N		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length					כיוול – גדלים מכניים - אורך		
749	A	P		(18.8 kN to 23.1 kN]	20 N		
750	A	P;T		(23.1 kN to 26.3 kN]	22 N		
751	A	T		(26.3 kN to 38.55 kN]	29 N		
752	A	P;T		(38.550 kN to 42.17 kN]	42 N		
753	A	P;T		(42.17 kN to 53.13 kN]	55 N		
754	A	P		(53.13 kN to 65.18 kN]	74 N		
755	A	P		(65.18 kN to 90.6 kN]	94 N		
756	A	P		(90.6 kN to 274.61 kN]	500 N		
757	A	P		(274.61 kN to 367.8 kN]	700 N		
758	A	P		(367.8 kN to 450.0 kN] kN	900 N		
759	A	P		(450 kN to 4.4 MN]	11 kN		
760	A	T		(0.05 kN to 0.5 kN]	0.37 kN	Manufacturer instructions SOP 10005	Load cells
761	A	T	כוח, מכשירים Presses	(0.5 kN to 1 kN]	0.79 kN		
762	A	T		(1 kN to 2 kN]	1.9 kN		
763	A	T		(24.5 kN to 98 kN]	0.1 % O.R. +98 N		
764	A	T		(98 kN to 500 kN]	0.1 % O.R. + 1 kN		
765	A	T		(500 kN to 4.4 MN]	0.1 % O.R. +15.6 kN		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Mechanical Quantities - Length					כיוול – גדלים מכניים - אורך		
766	A	P, P1	Torque, Torque Wrenches and drivers	מומנט, מפתחות מומנט [0.056 N·m to 1100 N·m]	1 % O.R.	ISO 6789 SOP 10033	Torque Transducers
767	A	P	Torque,	מומנט, בודקי פיתול [0.1 N·m to 1.15 N·m]	0.0017 N·m	Good Practice Guide 107 Guide to the calibration and testing of torque transducers Manufacturer instructions SOP 90150320	Standard weights, arms and hangers
768	A	P	Torque Transducer	(1.15 N·m to 33.9 N·m)	0.03 N·m		
769	A	P		(33.9 N·m to 339 N·m)	0.13 N·m		

Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Humidity					כיוול – גדלים פיזיקליים - לחות		
770	A	P	Relative Humidity Relative Humidity transducers,	לחות יחסית מתמרי לחות יחסית רגשי לחות יחסית (19 %rh to 24 %rh) From 14.6 °C to 27 °C	1.2 % rh	NPL-ISBN NO. 0-904457-24-9 Manufacturer instructions SOP 10152	Dew point mirror Humidity and temperature controller chamber
771	A	P	Relative Humidity probes,	אוגרי נתונים מדי לחות יחסית (24 %rh to 29 %rh) From 14.6 °C to 22 °C	1.2 % rh		
772	A	P	Relative Humidity data loggers,	מדי לחות יחסית (29 %rh to 36 %rh) From 14.6 °C to 19 °C	1.2 %rh		
773	A	P	Relative Humidity meter	(19% rh to 76% rh) From 27 °C to 40 °C	0.8 %rh		
774	A	P		(24% rh to 29% rh) From 22 °C to 27°C	0.8 %rh		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Humidity						כיוול – גדלים פיזיקליים - לחות		
775	A	P			(29% rh to 36% rh] From 19 °C to 27°C	0.8 %rh		
776	A	P			(36% rh to 76% rh] From 14.6 °C to 27°C	0.8 %rh		
777	A	P			(76% rh to 96% rh] From 25 °C to 40°C	1.2 %rh		
778	A	P			(24%rh to 62% rh] From 40 °C to 51°C	1.2 %rh		
779	A	P	Temperature,	טמפרטורה	(15 °C to 40 °C]	0.2 °C	IEC 60751	PT 100 probe of Dew point
780	A	P	Relative Humidity/ Temperature Gauges	רגשי לחות/טמפרטורה	(40 °C to 50 °C]	0.26 °C	Manufacturer instruction SOP 10152	mirror. Humidity and temperature controller chamber
781	A	T	Relative Humidity, Humidity Chambers, Humidity Controller <u>Climatic chambers</u>	לחות יחסית, בקרים לתאי סביבה תאים אקלימיים	(25 %rh to 75 %rh) From 15 °C to 35 °C	1.5 % rh	MIL-STD-810-G Manufacturer instruction	Humidity/Temperature Sensor
782	A	T			[75% rh to 96% rh] From 25 °C to 35 °C	1.5 % rh	SOP 10152	Humidity and temperature controller chamber
783	A	T			[25% rh to 61% rh] From 40 °C to 50 °C	1.5 % rh		
784	A	T			(75% rh to 93% rh) From 40 °C to 50 °C	1.5 % rh		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Liquid and Air Flow						כיל – גדלים פיזיקליים – זרימה, נוזל ואוויר		
785	A	P	Flowrate	ספיקה	[0.015 L/min to 50 L/min]	0.3 %	Manufacturer instructions	Primary standard - Cal - Trak SL800 (*)
			Gas flowmeters	מדי ספיקה גזיים			SOP 10007	
786	A	P, T			[0.015 L/min to 0.5 L/min]	1.1 %	SOP 10047	Mass Flow controllers (*)
787	A	P, T			(0.5 L/min to 5 L/min]	0.7 %		(*) Calibration gas is N ₂ .
788	A	P, T			(5 L/min to 10 L/min]	0.5 %		Volume flow rate may be presented in mass flow rate units at STP conditions, e.g. in SLPM
789	A	P, T			(10 L/min to 50 L/min]	1.0 %		Max pressure for calibration at P - 4.5 bar.
790	A	P1;T1			(0.1 L/min to 0.5 L/min]	1.1 %		Max pressure for calibration at P1 - 413 bar.
791	A	P1;T1			(0.5 L/min to 5 L/min]	0.7 %		
792	A	P1;T1			(5 L/min to 10 L/min]	0.5 %		
793	A	P1;T1			(10 L/min to 200 L/min]	1.0 %		
794	A	P1;T1			(200 L/min to 500 L/min]	1.4 %		



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Mass					כיל – גדלים פיזיקליים - מסה		
795	A	P;T	Mass Non-automatic weighing instruments Resolution 0.01 mg	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.01 mg	[1 mg to 1 g]	0.013 mg	Euramet cg 18 Manufacturer instructions OIML 33 NIST Handbook 1-105 SOP 90150319 The uncertainty quoted will depend on the performance of the weighing instrument under calibration and will depend on the calibration uncertainty of weights used. Available weights are: OIML Class E1 from 0.001 g to 500 g OIML Class E2 from 0.001 g to 5 kg OIML Class F1 from 0.001 g to 10 kg Weights 7 x 10 kg OIML Class F2, Weight 4 x 20 kg OIML Class M1,
796	A	P;T			(1 g to 100 g]	0.023 mg	
797	A	P;T			(100 g to 220 g]	0.064 mg	
798	A	P;T	Mass Non-automatic weighing instruments Resolution 0.1 mg	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.1 mg	(Up to 100 g] (100 g to 220 g]	0.12 mg 0.36 mg	
799	A	P;T			(220 g to 520 g]	0.38 mg	
800	A	P;T					
801	A	P;T	Mass Non-automatic weighing instruments Resolution 0.001 g	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.001 g	(Up to 50 g] (50 g to 4.1 kg]	0.003 g 0.012 g	
802	A	P;T					
803	A	P;T	Mass Non-automatic weighing instruments Resolution 0.01 g	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.01 g	(Up to 8.1 kg] (8.1 kg to 12.1 kg]	0.014 g 0.017 g	
804	A	P;T					
805	A	P;T	Mass Non-automatic weighing instruments Resolution 0.1 g	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.1 g	(12.1 kg to 32.1 kg] (32.1 kg to 60 kg]	0.12 g 0.3 g	
806	A	P;T					



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Mass					כיוול – גדלים פיזיקליים - מסה		
807	A	T	Mass Non-automatic weighing instruments Resolution 1 g	מסה, מאזניים לא אוטומטיים כושר הפרדה 1 g	(60 kg to 150 kg)	1 g	Weights 20 x 10 kg Test weight 50 kg Test weights 3 x 100 kg OIML class F, Weights 5 x 500 kg
808	A	T	Mass Non-automatic weighing instruments Resolution 0.01 kg	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.01 kg	(150 kg to 500 kg)	20 g	
809	A	T	Mass Non-automatic weighing instruments Resolution 0.5 kg	מסה, מאזניים לא אוטומטיים כושר הפרדה 0.5 kg	(500 kg to 2700 kg)	500 g	
Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Pressure					כיוול – גדלים פיזיקליים - לחץ		
810	A	P	Pneumatic pressure Absolute. Pressure indicating instruments and gauges	לחץ פניאומאטי, אבסולוטי מדידי לחץ פניאומאטיים	(10 kPa to 3.6 MPa)	275 Pa	Euramet cg 17 ASTM B40.100 BS EN 837 Manufacturer instructions SOP 9015031
811	A	P			(3.6 MPa to 7.1 MPa)	1.75 kPa	
812	A	P			(7.1 MPa to 70 MPa)	7.25 kPa	
813	A	T	Pneumatic pressure Absolute.	לחץ פניאומאטי, אבסולוטי	[10 kPa to 1 MPa]	5.4 kPa	SOP 10170
814	A	T	Pressure indicating instruments and gauges	מדידי לחץ פניאומאטיים	(1 MPa-70 MPa)	17 kPa	
815	A	P	Pneumatic pressure	לחץ פניאומאטי, יחסי	[0 Pa to 3.5 MPa]	300 Pa	Euramet cg 17 ASTM B40.100 BS EN 837 Manufacturer instructions SOP 90150314
816	A	P	Gauge	מדידי לחץ פניאומאטיים	(3.5 MPa to 7 MPa)	1.8 kPa	
817	A	P	Pressure indicating instruments and gauges		(7 MPa to 70 MPa)	7.2 kPa	



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Calibration – Physical Quantities - Mass						כיוול – גדלים פיזיקליים - מסה		
818	A	T	Pneumatic pressure	לחץ פניאומאטי, יחסי מדידי לחץ פניאומאטיים	[0 Pa to 2 MPa]	9.8 kPa	Euramet cg 17	Druck PM620,PM612
819	A	T	Gauge		(2 MPa to 10 MPa]	10 kPa	ASTM B40.100	
820	A	T	Pressure indicating instruments and gauges		(10 MPa to 70 MPa]	14 kPa	BS EN 837 Manufacturer instructions SOP10170	
821	A	P	Hydraulic pressure, Gauge.	לחץ הידראולי מדידי לחץ הידראוליים	(69.1 MPa to 83 MPa]	66 kPa	ASME B40.100	Comparison vs. DWT AREMECA BH4 - 4000B
822	A	P	Pressure indicating instruments and gauges		(83 MPa to 110 MPa]	84 kPa	EURAMET cg17 BS EN 837	
823	A	P			(110 MPa to 138 MPa]	100 kPa	Manufacturer instruction	
824	A	P			(138 MPa to 414 MPa]	290 kPa	SOP 10006	
825	A	P,T	Hydraulic pressure, Gauge.	לחץ הידראולי מדידי לחץ	(0.2 MPa to 3.6 MPa]	20 kPa	SOP 10170	Druck IDOS UPM Sensotech Pressure pump
826	A	P,T	Pressure indicating instruments and gauges		(3.6 MPa to 6.9 MPa]	42 kPa		
827	A	P,T			(6.9 MPa to 69 MPa]	43 kPa		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Temperature						כיוול – גדלים פיזיקליים - טמפרטורה		
828	A	P	Temperature.	טמפרטורה	[-80 °C to -40 °C]	0.06 °C	IEC 60751 SOP 9015039	SPRT, PRT
829	A	P	Thermometers sensors with display with resistance sensors	מדי חום עם תצוגה עם רגש התנגדות	[-40 °C to 100 °C]	0.04 °C		Isotech milliK
830	A	P			0.01 °C (Triple point of water)	0.04 °C		Isotech microK, TWP,
831	A	P			(100 °C to 150 °C]	0.05 °C		Calibration baths,
832	A	P			(150 °C to 200 °C]	0.06 °C		Thermocouple calibration furnace
833	A	P			(200 °C to 420 °C]	0.13 °C		
834	A	P			(420 °C to 600 °C]	0.5 °C		
835	A	P			(600 °C to 1000 °C]	1.0 °C		
836	A	P	Temperature.	טמפרטורה	(-80 °C to 0 °C]	0.7 °C	ASTM-E-220 ASTM-E-230 Euramet cg8 ITS-90 Manufacturer instructions SOP 9015038	PRT, TC type S, Calibration baths, Thermocouple calibration furnace
837	A	P	Thermocouples noble metal	צמידים תרמיים, מתכות אצילות	(0 °C to 50 °C]	0.4 °C		
838	A	P			(50 °C to 200 °C]	0.5 °C		
839	A	P			(200 °C to 600 °C]	0.7 °C		
840	A	P			(600 °C to 1000 °C]	1.0 °C		



Item	Scope Type	Site	Measurand Instrument, Gauge		Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
Calibration – Physical Quantities - Temperature						כיוול – גדלים פיזיקליים - טמפרטורה		
841	A	P	Temperature. Thermocouples Type B	טמפרטורה צמידים תרמיים מסוג B	100 °C to 1000 °C	1.5 °C	ASTM-E-230 Euramet cg8 ITS-90 Manufacturer instructions SOP 9015038	PRT, TC type S, Calibration baths, Thermocouple calibration furnace
842	A	P	Temperature. Thermocouples base metal	טמפרטורה צמידים תרמיים מתכות בסיסיות	(-80 °C to 0 °C]	0.7 °C	ASTM-E-230 Euramet cg8 ITS-90 SOP 9015038	PRT, TC type S, Calibration baths, Thermocouple calibration furnace
843	A	P			(0 °C to 50 °C]	0.4 °C		
844	A	P			(50 °C to 200 °C]	0.5 °C		
845	A	P			(200 °C to 600 °C]	0.7 °C		
846	A	P			(600 °C to 1000 °C]	1.0 °C		
847	A	T	Temperature, Thermometers sensors with display	טמפרטורה מדי חום עם תצוגה	[-25 °C to 140 °C]	0.4 °C	IEC 60751 Manufacturer instructions SOP 9015039	PRT with Display Dry blocks calibrators
848	A	T			(140 °C to 600 °C]	0.5 °C		Dry blocks calibrators
849	A	P:T	Temperature, Temperature indicators and simulators for Resistance sensors	טמפרטורה, מדי ומדמי טמפרטורה עבור מדי התנגדות	[-200 °C to 850 °C]	0.01 °C	EURAMET cg-11 SOP 10752 SOP 10756	Calibration by means of electrical calibration,
850	A	P	Temperature, Temperature indicators and simulators for Base metal thermocouples type K	טמפרטורה, מדי ומדמי טמפרטורה עבור צמידים תרמיים מתכות בסיסיות מסוג K	[-200 °C to 1370 °C]	0.2 °C	EURAMET cg-11 SOP 10754	Calibration by means of electrical calibration, cold junction compensation on
851	A	T			[-200 °C to 1370 °C]	0.4 °C	SOP 10650, SOP 10700	cold junction compensation off
852	A	P	Temperature, Temperature indicators and simulators for Base metal thermocouples type J	טמפרטורה, מדי ומדמי טמפרטורה עבור צמידים תרמיים מתכות בסיסיות מסוג J	[-200 °C to 1200 °C]	0.2 °C	EURAMET cg-11 SOP 10754	Calibration by means of electrical calibration, cold junction compensation on
853	A	T			[-200 °C to 1200 °C]	0.4 °C	SOP 10650, SOP 10700	cold junction compensation off



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Calibration – Physical Quantities - Temperature						כיוול – גדלים פיזיקליים - טמפרטורה		
854	A	P	Temperature, Temperature indicators and simulators for Base metal thermocouples type T	טמפרטורה, מדי ומדמי טמפרטורה עבור צמדים תרמיים מתכות בסיסיות מסוג T	[-200 °C to 400 °C]	0.2 °C	EURAMET cg-11 SOP 10754	Calibration by means of electrical calibration, cold junction compensation on
855	A	T			[-200 °C to 400 °C]	0.4 °C	SOP 10650, SOP 10700	cold junction compensation off
856	A	P	Temperature, Temperature indicators and simulators for Base metal thermocouples type E	טמפרטורה, מדי ומדמי טמפרטורה עבור צמדים תרמיים מתכות בסיסיות מסוג E	[-200 °C to 1000 °C]	0.2 °C	EURAMET cg-11 SOP 10754	Calibration by means of electrical calibration, cold junction compensation on
857	A	T			[-200 °C to 1000 °C]	0.4 °C	SOP 10650 SOP 10700	cold junction compensation off
858	A	P	Temperature, Temperature indicators and simulators for Noble metal thermocouples type R,S	טמפרטורה, מדי ומדמי טמפרטורה עבור צמדים תרמיים מתכות אצילות מסוג S,R	[-20 °C to 1760 °C]	0.2 °C	EURAMET cg-11 SOP 10754	Calibration by means of electrical calibration, cold junction compensation on
859	A	T		Measure מודד	[-20 °C to 1760 °C]	0.7 °C	SOP 10650	cold junction compensation off
860	A	T		Source מקור	[-20 °C to 1760 °C]	0.4 °C	SOP 10700	
861	A	P,T	Temperature, Furnaces Furnaces Controller	טמפרטורה, תנורים בקרים לתנורים	[-70 °C to -40 °C]	0.4 °C	MIL-STD-810-G	Thermocouples
862	A	P,T			[-40 °C to 70 °C]	0.7 °C	AMS 2750E	
863	A	P,T			[70 °C to 180 °C]	0.5 °C	SAE-AMS-H-6088	
864	A	P,T			(180 °C to 250 °C)	1.1 °C	MIL-H-6875	
865	A	P,T			(250 °C to 700 °C)	2.1 °C	SOP 9015037	
866	A	P,T			(700 °C to 1000 °C)	2.5 °C		
867	A	P,T	Temperature, Furnaces	טמפרטורה, תנורים	[-70 °C to 180 °C]	0.7 °C	MIL-STD-810-G	Thermocouples



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Calibration – Physical Quantities - Temperature						כיוול – גדלים פיזיקליים - טמפרטורה		
868	A	P,T	Furnaces Controller Including Uniformity	בקרת תנורים כולל אחידות	(180 °C to 250 °C]	1.1 °C	AMS 2750E	
869	A	P,T			(250 °C to 700 °C]	1.4 °C	SAE-AMS-H-6088	
870	A	P,T			(700 °C to 1000 °C]	3.6 °C	MIL-H-6875 SOP 9015037	