

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P291488

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-A19/156-UNV-L92765-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2169.0 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

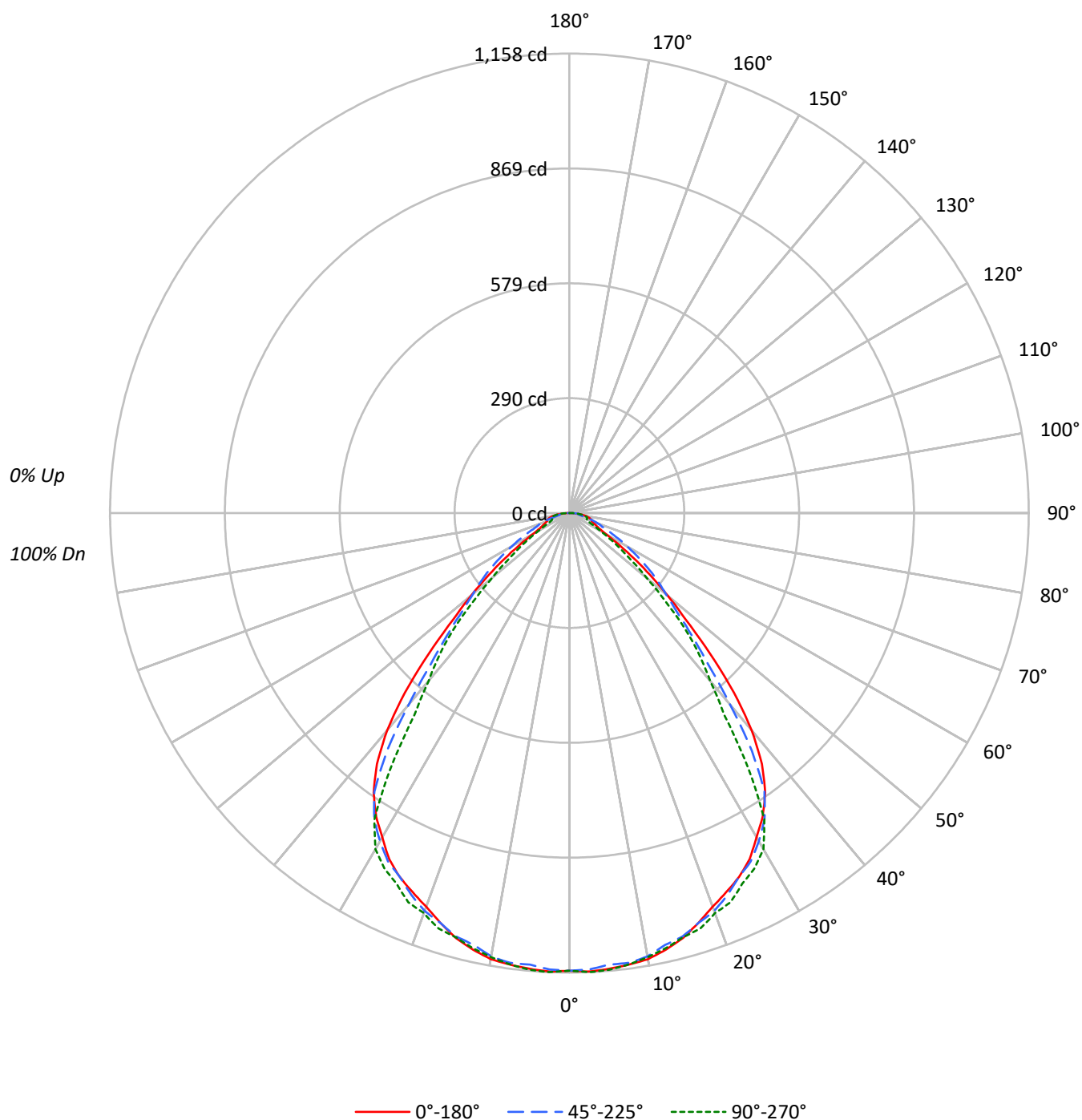
Input Watts (W): 18.693
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3104	3104	3104
5°	3114	3085	3121
10°	3119	3100	3105
15°	3087	3076	3083
20°	3023	3056	3073
25°	3004	3003	3061
30°	2931	2967	3039
35°	2826	2815	2587
40°	2510	2215	1939
45°	1905	1657	1568
50°	1351	1326	1064
55°	925	1132	731
60°	572	903	489
65°	471	695	354
70°	469	606	363
75°	562	434	486
80°	646	400	607
85°	614	704	689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	5.0
10°-20°	312.4	14.4
20°-30°	469.7	21.7
30°-40°	512.1	23.6
40°-50°	358.6	16.5
50°-60°	203.0	9.4
60°-70°	111.1	5.1
70°-80°	67.3	3.1
80°-90°	25.5	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	891.5	41.1
0°-40°	1403.6	64.7
0°-60°	1965.1	90.6
0°-90°	2169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2169.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1153	1153	1153	1153	1153	
5°	1153	1151	1142	1155	1155	110
15°	1108	1105	1104	1120	1107	312
25°	1012	1014	1011	1035	1031	465
35°	860	856	857	813	788	530
45°	500	522	435	430	412	389
55°	197	236	241	239	156	180
65°	74	122	109	138	56	76
75°	54	78	42	82	47	56
85°	20	32	23	28	22	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1153.4	1153.4	1153.4	1153.4	1153.4
2.5°	1156.4	1154.9	1151.4	1158.4	1157.9
5°	1152.9	1150.9	1142.0	1155.4	1155.4
7.5°	1147.9	1143.0	1143.5	1150.9	1147.4
10°	1141.5	1133.0	1134.5	1136.5	1136.5
12.5°	1126.6	1118.6	1114.7	1121.1	1123.1
15°	1108.2	1105.2	1104.2	1120.1	1106.7
17.5°	1082.4	1088.8	1082.9	1095.8	1097.8
20°	1055.6	1068.0	1067.0	1075.9	1073.0
22.5°	1033.7	1041.7	1041.7	1052.6	1061.5
25°	1011.9	1013.9	1011.4	1034.7	1030.8
27.5°	983.6	982.1	990.0	1002.0	1009.9
30°	943.4	943.9	954.8	970.7	978.1
32.5°	906.6	902.2	915.6	922.5	914.6
35°	860.4	856.5	857.0	813.3	787.5
37.5°	797.4	800.9	755.2	675.3	641.5
40°	714.5	721.4	630.6	571.0	552.1
42.5°	614.2	616.2	516.9	497.5	485.1
45°	500.5	522.3	435.4	430.0	412.1
47.5°	396.7	437.4	364.9	368.4	325.7
50°	322.7	363.4	316.8	318.3	254.2
52.5°	255.2	294.9	279.5	275.1	199.6
55°	197.1	235.8	241.3	239.3	155.9
57.5°	145.0	186.7	202.6	210.0	120.2
60°	106.3	152.4	167.8	182.7	90.9
62.5°	84.4	132.1	137.5	159.4	70.5
65°	74.0	121.6	109.2	138.0	55.6
67.5°	66.0	115.7	88.9	122.1	48.7
70°	59.6	104.3	77.0	109.2	46.2
72.5°	59.6	91.4	60.6	96.8	46.7
75°	54.1	78.0	41.7	81.9	46.7
77.5°	48.2	66.5	31.3	66.5	43.7
80°	41.7	52.1	25.8	51.1	39.2
82.5°	30.8	39.2	22.3	38.2	31.8
85°	19.9	32.3	22.8	27.8	22.3
87.5°	9.4	16.4	14.4	13.9	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)