

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: P291103

Luminaire Tested: **14GR-LD5-28-A-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A-UNV-L92765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2572.0 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

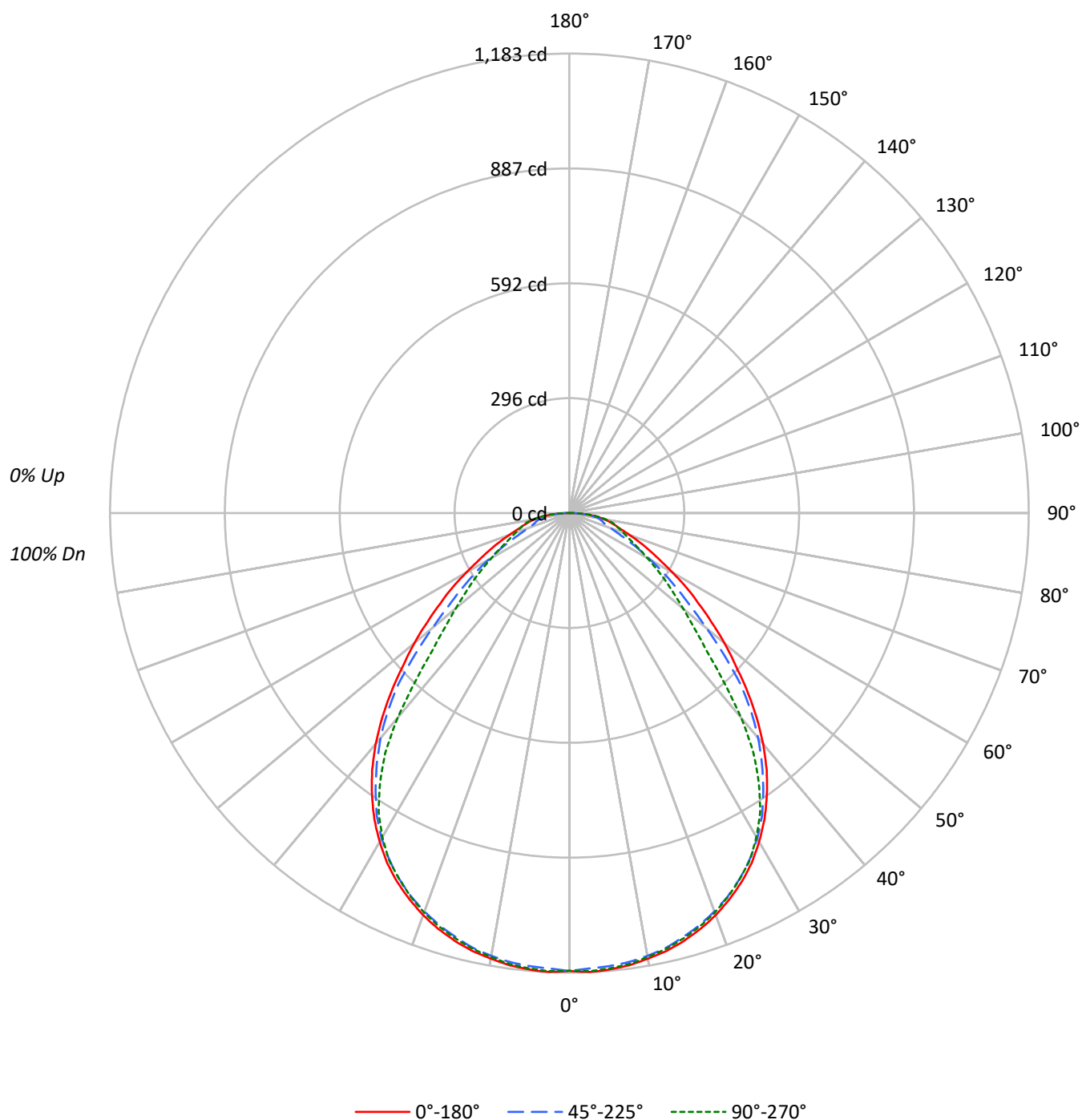
Input Watts (W): 22.506
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	98	107	103	100	97		99	96	94		95	93	91		92	90	88
2	101	94	88	83	99	92	86	82		88	84	80		85	81	78		82	79	76
3	93	84	76	71	91	82	75	70		79	74	69		77	72	68		74	70	66
4	86	75	67	61	84	74	67	61		72	65	60		69	64	59		67	62	58
5	80	68	60	54	78	67	59	53		65	58	53		63	57	52		61	56	52
6	74	62	54	48	72	61	53	47		59	52	47		58	51	47		56	51	46
7	69	57	48	43	67	56	48	43		54	47	42		53	47	42		52	46	42
8	65	52	44	38	63	51	44	38		50	43	38		49	43	38		48	42	38
9	61	48	40	35	59	47	40	35		46	39	35		45	39	35		44	39	34
10	57	44	37	32	56	44	37	32		43	36	32		42	36	32		41	36	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3172	3172	3172
5°	3187	3163	3179
10°	3183	3163	3172
15°	3177	3149	3159
20°	3154	3125	3134
25°	3113	3083	3084
30°	3037	3005	2992
35°	2912	2859	2795
40°	2726	2657	2418
45°	2462	2369	1889
50°	2183	1923	1598
55°	1906	1578	1410
60°	1652	1299	1244
65°	1449	1042	1149
70°	1293	884	1157
75°	1261	932	1292
80°	1398	1176	1481
85°	1457	1254	1735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	4.3
10°-20°	320.3	12.5
20°-30°	479.2	18.6
30°-40°	541.0	21.0
40°-50°	458.9	17.8
50°-60°	310.5	12.1
60°-70°	185.3	7.2
70°-80°	116.1	4.5
80°-90°	48.8	1.9
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°	911.4	35.4
0°-40°	1452.3	56.5
0°-60°	2221.8	86.4
0°-90°	2572.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2572.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1180	1176	1171	1179	1177	112
15°	1140	1138	1130	1138	1134	322
25°	1048	1045	1038	1043	1039	482
35°	886	880	870	863	851	552
45°	647	649	622	533	496	499
55°	406	387	336	301	300	366
65°	228	189	164	174	180	227
75°	121	108	90	118	124	130
85°	47	45	41	53	56	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1178.6	1178.6	1178.6	1178.6	1178.6
2.5°	1182.8	1179.2	1173.8	1181.0	1180.4
5°	1179.8	1176.2	1170.8	1179.2	1176.8
7.5°	1174.4	1171.4	1166.1	1173.8	1171.4
10°	1164.9	1162.5	1157.7	1164.3	1160.7
12.5°	1154.7	1152.9	1146.9	1152.9	1149.3
15°	1140.4	1138.0	1130.2	1138.0	1133.8
17.5°	1122.5	1119.5	1112.9	1119.5	1115.9
20°	1101.5	1098.0	1091.4	1098.0	1094.4
22.5°	1076.5	1073.5	1067.5	1073.5	1068.7
25°	1048.4	1044.8	1038.2	1043.0	1038.8
27.5°	1016.1	1011.3	1005.4	1009.0	1006.6
30°	977.3	971.3	967.1	967.1	963.0
32.5°	934.9	930.7	923.5	919.3	914.0
35°	886.5	880.5	870.4	862.6	850.7
37.5°	834.5	827.4	814.8	795.1	779.0
40°	776.0	767.0	756.3	717.4	688.2
42.5°	713.3	711.5	692.9	626.6	586.0
45°	646.9	649.3	622.5	533.4	496.4
47.5°	580.0	588.4	539.4	452.2	433.1
50°	521.5	524.5	459.4	392.5	381.7
52.5°	461.2	456.4	391.9	345.3	337.5
55°	406.2	387.1	336.3	301.1	300.5
57.5°	357.8	322.6	287.3	261.0	264.0
60°	307.0	267.6	241.3	227.0	231.2
62.5°	262.2	224.6	201.3	197.1	204.3
65°	227.6	188.8	163.7	174.4	180.4
67.5°	194.7	161.9	133.2	158.9	161.3
70°	164.3	140.4	112.3	146.4	147.0
72.5°	139.2	124.3	97.4	132.6	134.4
75°	121.3	108.1	89.6	118.3	124.3
77.5°	106.3	92.6	83.0	102.1	112.3
80°	90.2	74.7	75.9	85.4	95.6
82.5°	69.3	57.9	60.3	70.5	77.7
85°	47.2	44.8	40.6	52.6	56.2
87.5°	25.1	23.9	20.9	29.9	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)