

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: P291104

Luminaire Tested: **14GR-LD5-28-A-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291104
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-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2639.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

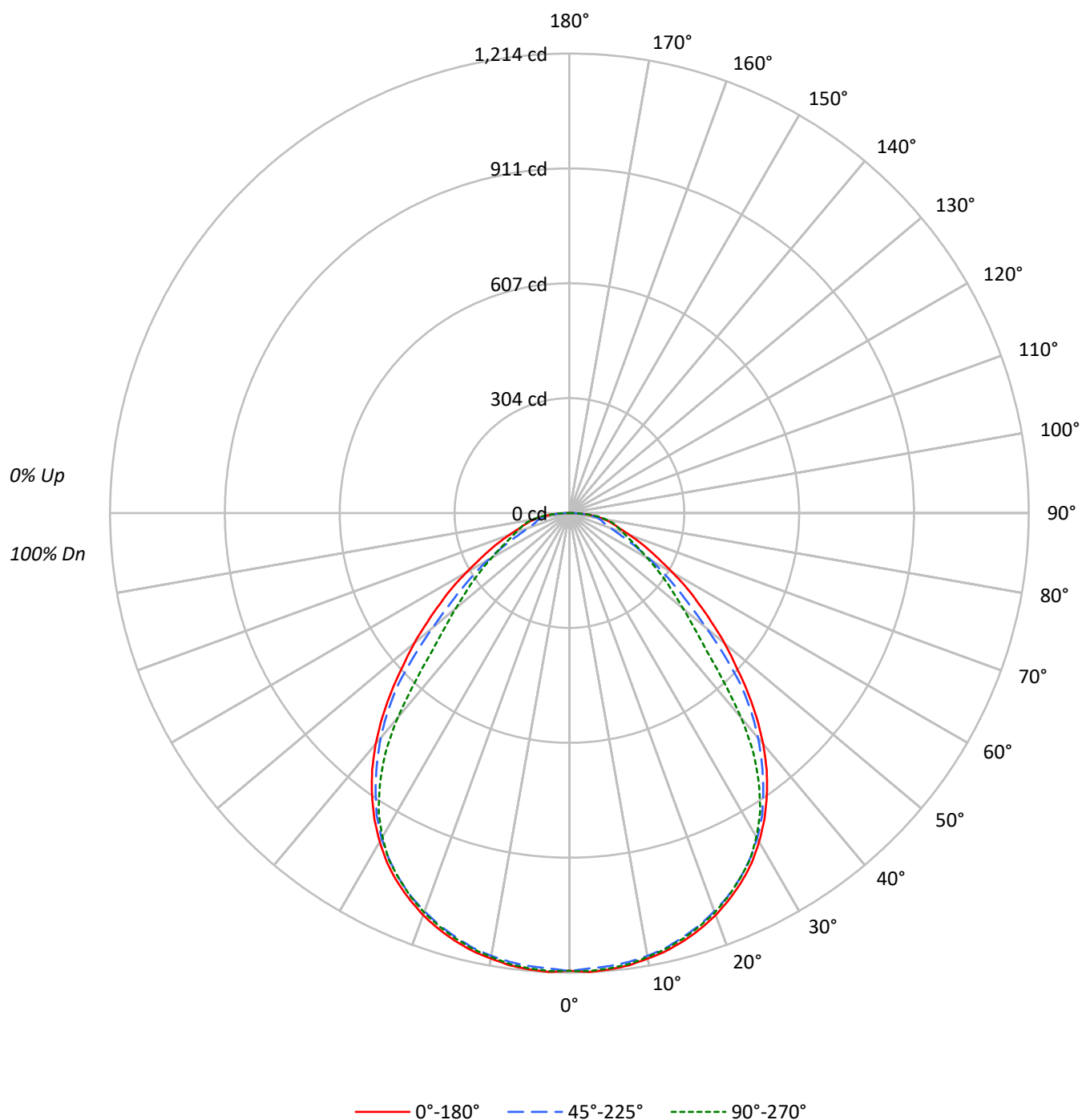
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74		
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64		
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44		
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36		
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33		
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3254	3254	3254
5°	3270	3245	3262
10°	3266	3246	3254
15°	3260	3231	3241
20°	3237	3207	3216
25°	3194	3163	3165
30°	3116	3083	3070
35°	2988	2934	2867
40°	2797	2726	2480
45°	2526	2431	1938
50°	2240	1973	1640
55°	1955	1619	1446
60°	1695	1333	1277
65°	1487	1069	1179
70°	1327	906	1186
75°	1293	955	1326
80°	1435	1206	1520
85°	1494	1288	1778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	4.3
10°-20°	328.7	12.5
20°-30°	491.7	18.6
30°-40°	555.0	21.0
40°-50°	470.9	17.8
50°-60°	318.6	12.1
60°-70°	190.2	7.2
70°-80°	119.1	4.5
80°-90°	50.1	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°	935.1	35.4
0°-40°	1490.2	56.5
0°-60°	2279.6	86.4
0°-90°	2639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1210	1207	1201	1210	1208	115
15°	1170	1168	1160	1168	1163	330
25°	1076	1072	1065	1070	1066	495
35°	910	904	893	885	873	567
45°	664	666	639	547	509	512
55°	417	397	345	309	308	375
65°	234	194	168	179	185	233
75°	124	111	92	121	128	134
85°	48	46	42	54	58	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.3	1209.3	1209.3	1209.3	1209.3
2.5°	1213.6	1209.9	1204.4	1211.8	1211.1
5°	1210.5	1206.9	1201.3	1209.9	1207.5
7.5°	1205.0	1202.0	1196.4	1204.4	1202.0
10°	1195.2	1192.8	1187.9	1194.6	1190.9
12.5°	1184.8	1183.0	1176.8	1183.0	1179.3
15°	1170.1	1167.6	1159.7	1167.6	1163.3
17.5°	1151.7	1148.6	1141.9	1148.6	1144.9
20°	1130.2	1126.6	1119.8	1126.6	1122.9
22.5°	1104.5	1101.4	1095.3	1101.4	1096.5
25°	1075.7	1072.0	1065.3	1070.2	1065.9
27.5°	1042.6	1037.7	1031.6	1035.2	1032.8
30°	1002.7	996.6	992.3	992.3	988.0
32.5°	959.2	954.9	947.6	943.3	937.8
35°	909.6	903.5	893.0	885.1	872.8
37.5°	856.3	848.9	836.0	815.8	799.3
40°	796.2	787.0	776.0	736.1	706.1
42.5°	731.8	730.0	711.0	643.0	601.3
45°	663.8	666.3	638.7	547.3	509.3
47.5°	595.2	603.7	553.5	464.0	444.4
50°	535.1	538.2	471.3	402.7	391.7
52.5°	473.2	468.3	402.1	354.3	346.3
55°	416.8	397.2	345.1	308.9	308.3
57.5°	367.1	331.0	294.8	267.8	270.9
60°	315.0	274.6	247.6	232.9	237.2
62.5°	269.1	230.5	206.6	202.3	209.6
65°	233.5	193.7	167.9	179.0	185.1
67.5°	199.8	166.1	136.7	163.0	165.5
70°	168.6	144.0	115.2	150.2	150.8
72.5°	142.8	127.5	99.9	136.1	137.9
75°	124.4	110.9	91.9	121.4	127.5
77.5°	109.1	95.0	85.2	104.8	115.2
80°	92.6	76.6	77.8	87.6	98.1
82.5°	71.1	59.5	61.9	72.3	79.7
85°	48.4	46.0	41.7	53.9	57.6
87.5°	25.7	24.5	21.5	30.6	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)