

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: P290709

Luminaire Tested: **14GR-LD5-28-F1-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-F1-UNV-L92765-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2348.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

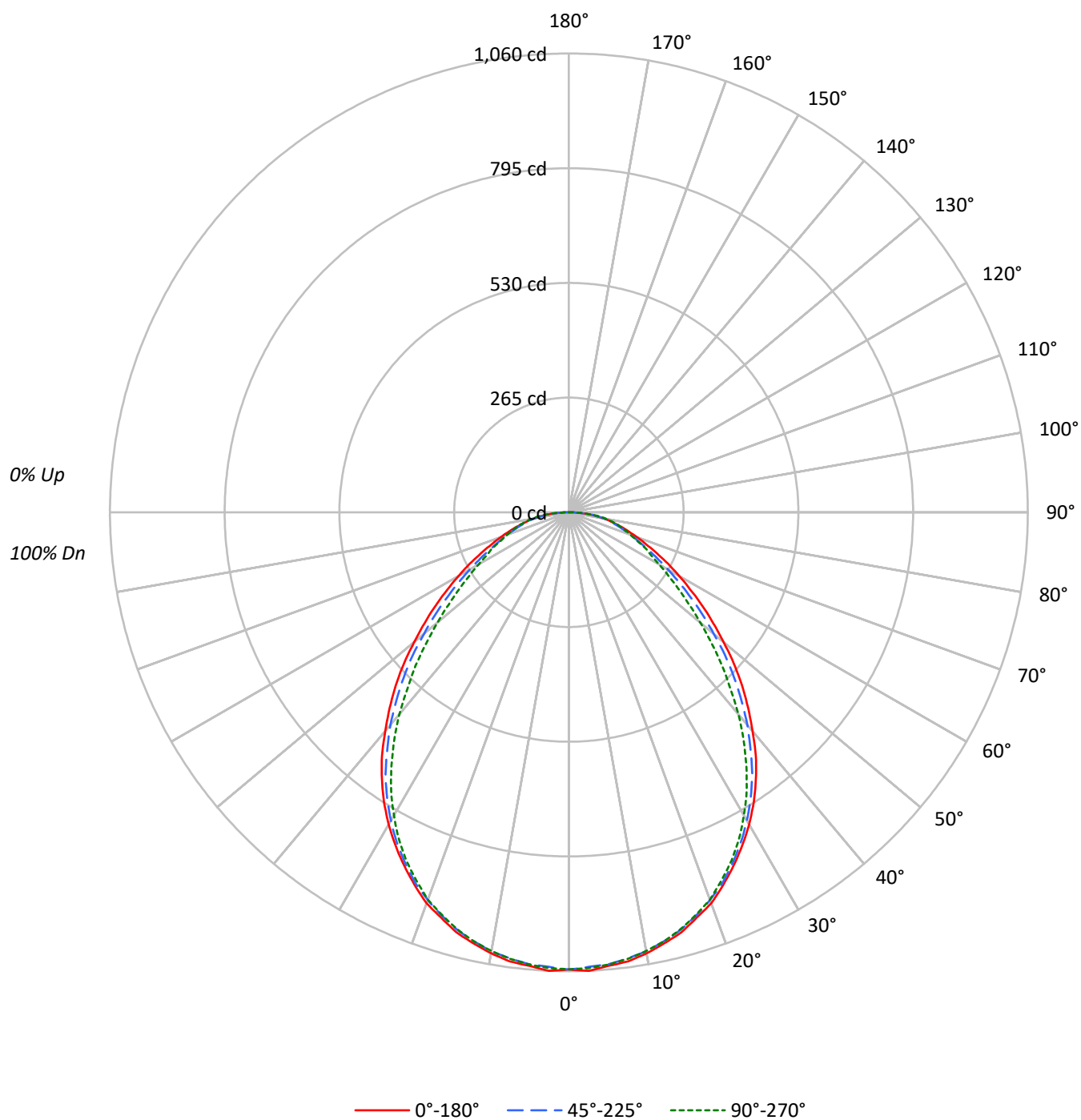
Input Watts (W): 22.041
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2842	2842	2842
5°	2841	2831	2832
10°	2826	2813	2812
15°	2798	2781	2777
20°	2753	2730	2727
25°	2673	2656	2637
30°	2587	2555	2512
35°	2473	2426	2346
40°	2316	2252	2140
45°	2151	2054	1905
50°	1951	1829	1658
55°	1765	1616	1449
60°	1584	1417	1292
65°	1422	1265	1237
70°	1312	1177	1190
75°	1254	1181	1248
80°	1268	1260	1359
85°	1312	1297	1445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	4.2
10°-20°	281.8	12.0
20°-30°	411.6	17.5
30°-40°	458.6	19.5
40°-50°	413.2	17.6
50°-60°	308.9	13.2
60°-70°	203.7	8.7
70°-80°	124.4	5.3
80°-90°	46.1	2.0
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°	793.1	33.8
0°-40°	1251.7	53.3
0°-60°	1973.7	84.1
0°-90°	2348.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2348.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1052	1051	1048	1053	1048	100
15°	1004	1000	998	1004	997	283
25°	900	897	894	896	888	414
35°	753	746	738	726	714	469
45°	565	559	540	515	500	435
55°	376	370	344	316	309	337
65°	223	216	199	190	194	224
75°	121	118	114	117	120	129
85°	42	41	42	46	47	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1056.0	1056.0	1056.0	1056.0	1056.0
2.5°	1060.3	1055.4	1051.1	1057.6	1053.8
5°	1051.6	1050.6	1047.9	1053.3	1048.4
7.5°	1046.3	1042.5	1039.3	1045.7	1040.3
10°	1034.4	1032.3	1029.6	1035.0	1029.0
12.5°	1019.9	1017.7	1015.1	1021.5	1015.1
15°	1004.3	1000.5	998.4	1004.3	996.8
17.5°	981.7	980.1	976.8	982.8	975.2
20°	961.2	955.3	953.2	957.5	952.1
22.5°	931.6	927.3	926.8	929.5	920.3
25°	900.4	897.2	894.5	896.1	888.0
27.5°	867.6	863.3	860.0	859.5	850.9
30°	832.6	827.2	822.4	818.1	808.4
32.5°	794.4	787.9	781.5	774.5	764.2
35°	752.9	746.5	738.4	725.5	714.2
37.5°	709.4	701.8	688.9	673.8	662.5
40°	659.3	655.5	641.0	621.6	609.2
42.5°	612.5	608.2	589.9	568.3	551.7
45°	565.1	559.2	539.8	515.1	500.5
47.5°	516.7	510.8	489.2	458.5	445.6
50°	466.1	462.9	437.0	409.0	396.1
52.5°	419.8	416.0	389.7	361.7	349.8
55°	376.2	370.3	344.5	315.9	308.9
57.5°	332.6	326.2	301.9	277.7	272.9
60°	294.4	286.3	263.2	244.3	240.0
62.5°	258.3	249.2	229.8	215.3	213.1
65°	223.4	216.4	198.6	190.5	194.3
67.5°	193.2	186.2	173.3	170.1	169.0
70°	166.8	160.4	149.6	150.7	151.2
72.5°	142.6	138.9	130.8	133.5	135.6
75°	120.6	118.4	113.6	117.3	120.0
77.5°	100.6	99.0	96.9	100.1	104.4
80°	81.8	80.7	81.3	83.4	87.7
82.5°	63.0	60.8	62.4	66.7	69.4
85°	42.5	40.9	42.0	46.3	46.8
87.5°	19.9	19.9	19.4	22.6	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)