

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: P290595

Luminaire Tested: **14GR-LD5-20-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290595
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-LD5-20-F1-UNV-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2057.0 lumens
Efficiency: N/A
Efficacy: 130.9 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

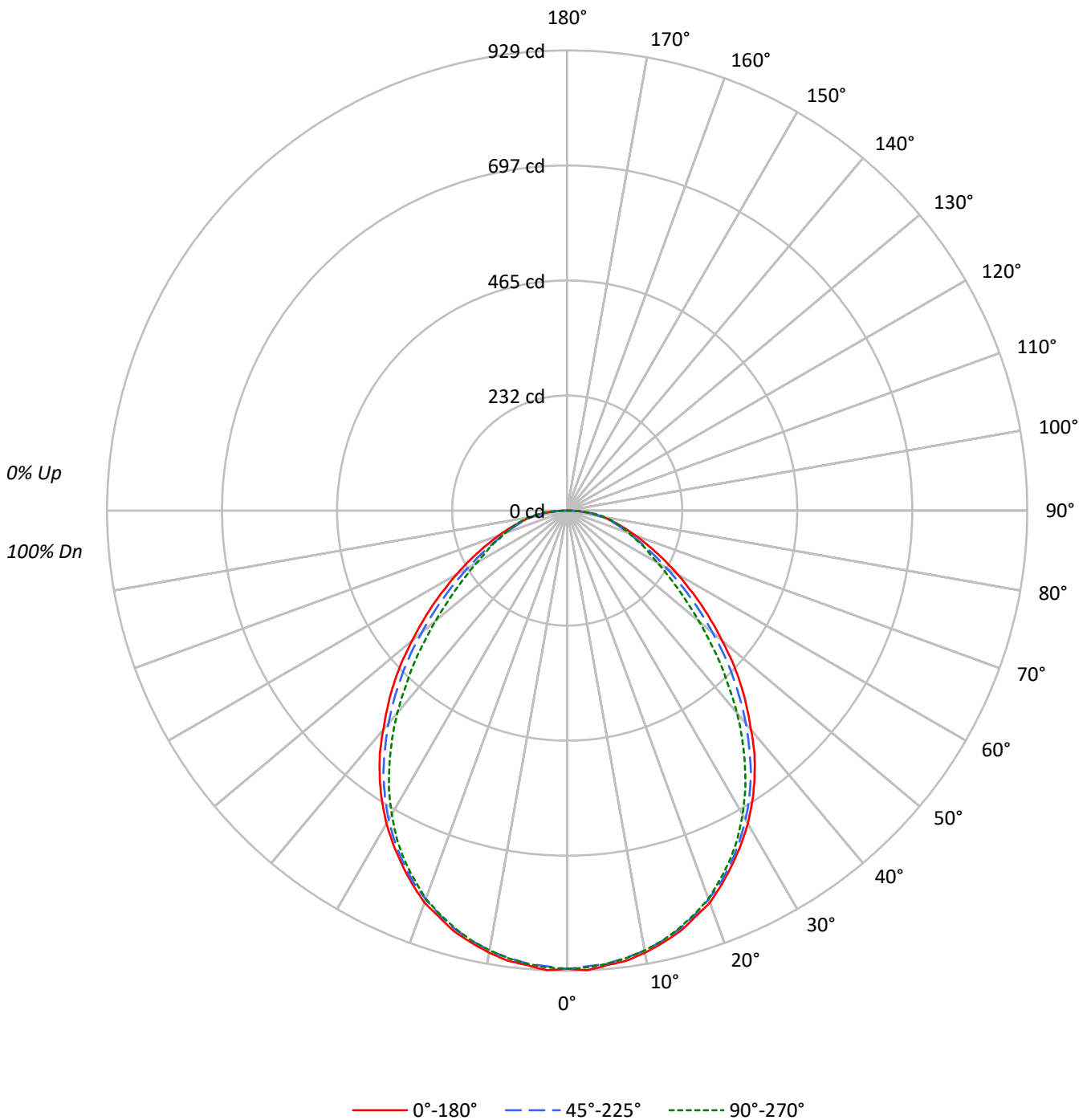
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2489	2489	2489
5°	2489	2480	2481
10°	2476	2465	2463
15°	2451	2437	2433
20°	2412	2391	2389
25°	2342	2327	2310
30°	2266	2239	2201
35°	2167	2125	2055
40°	2029	1973	1875
45°	1884	1800	1669
50°	1709	1603	1453
55°	1546	1416	1270
60°	1388	1241	1132
65°	1246	1108	1084
70°	1150	1031	1042
75°	1098	1035	1093
80°	1111	1103	1192
85°	1149	1136	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	4.2
10°-20°	246.9	12.0
20°-30°	360.6	17.5
30°-40°	401.8	19.5
40°-50°	362.0	17.6
50°-60°	270.6	13.2
60°-70°	178.5	8.7
70°-80°	109.0	5.3
80°-90°	40.4	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°	694.8	33.8
0°-40°	1096.5	53.3
0°-60°	1729.1	84.1
0°-90°	2057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	925	925	925	925	925	
5°	921	920	918	923	918	88
15°	880	876	875	880	873	248
25°	789	786	784	785	778	363
35°	660	654	647	636	626	411
45°	495	490	473	451	438	381
55°	330	324	302	277	271	295
65°	196	190	174	167	170	196
75°	106	104	100	103	105	113
85°	37	36	37	40	41	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	925.1	925.1	925.1	925.1	925.1
2.5°	928.9	924.6	920.8	926.5	923.2
5°	921.3	920.4	918.0	922.7	918.5
7.5°	916.6	913.3	910.5	916.1	911.4
10°	906.2	904.3	902.0	906.7	901.5
12.5°	893.5	891.6	889.3	894.9	889.3
15°	879.8	876.5	874.6	879.8	873.2
17.5°	860.0	858.6	855.8	861.0	854.4
20°	842.1	836.9	835.0	838.8	834.1
22.5°	816.2	812.4	811.9	814.3	806.3
25°	788.8	786.0	783.6	785.0	778.0
27.5°	760.1	756.3	753.5	753.0	745.4
30°	729.4	724.7	720.5	716.7	708.2
32.5°	695.9	690.3	684.6	678.5	669.5
35°	659.6	654.0	646.9	635.6	625.7
37.5°	621.4	614.8	603.5	590.3	580.4
40°	577.6	574.3	561.6	544.6	533.7
42.5°	536.6	532.8	516.8	497.9	483.3
45°	495.1	489.9	472.9	451.2	438.5
47.5°	452.6	447.5	428.6	401.7	390.4
50°	408.3	405.5	382.9	358.3	347.0
52.5°	367.8	364.5	341.4	316.8	306.5
55°	329.6	324.4	301.8	276.8	270.6
57.5°	291.4	285.7	264.5	243.3	239.1
60°	257.9	250.8	230.6	214.1	210.3
62.5°	226.3	218.3	201.3	188.6	186.7
65°	195.7	189.5	174.0	166.9	170.2
67.5°	169.3	163.1	151.8	149.0	148.1
70°	146.2	140.5	131.1	132.0	132.5
72.5°	124.9	121.6	114.6	116.9	118.8
75°	105.6	103.7	99.5	102.8	105.1
77.5°	88.2	86.8	84.9	87.7	91.5
80°	71.7	70.7	71.2	73.1	76.9
82.5°	55.2	53.3	54.7	58.5	60.8
85°	37.2	35.8	36.8	40.5	41.0
87.5°	17.4	17.4	17.0	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)