

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: P290630

Luminaire Tested: **14GR-LD5-36-F1-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290630  
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-LD5-36-F1-UNV-L82765-W2A1-U-3500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3570.0 lumens  
Efficiency: N/A  
Efficacy: 121.5 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

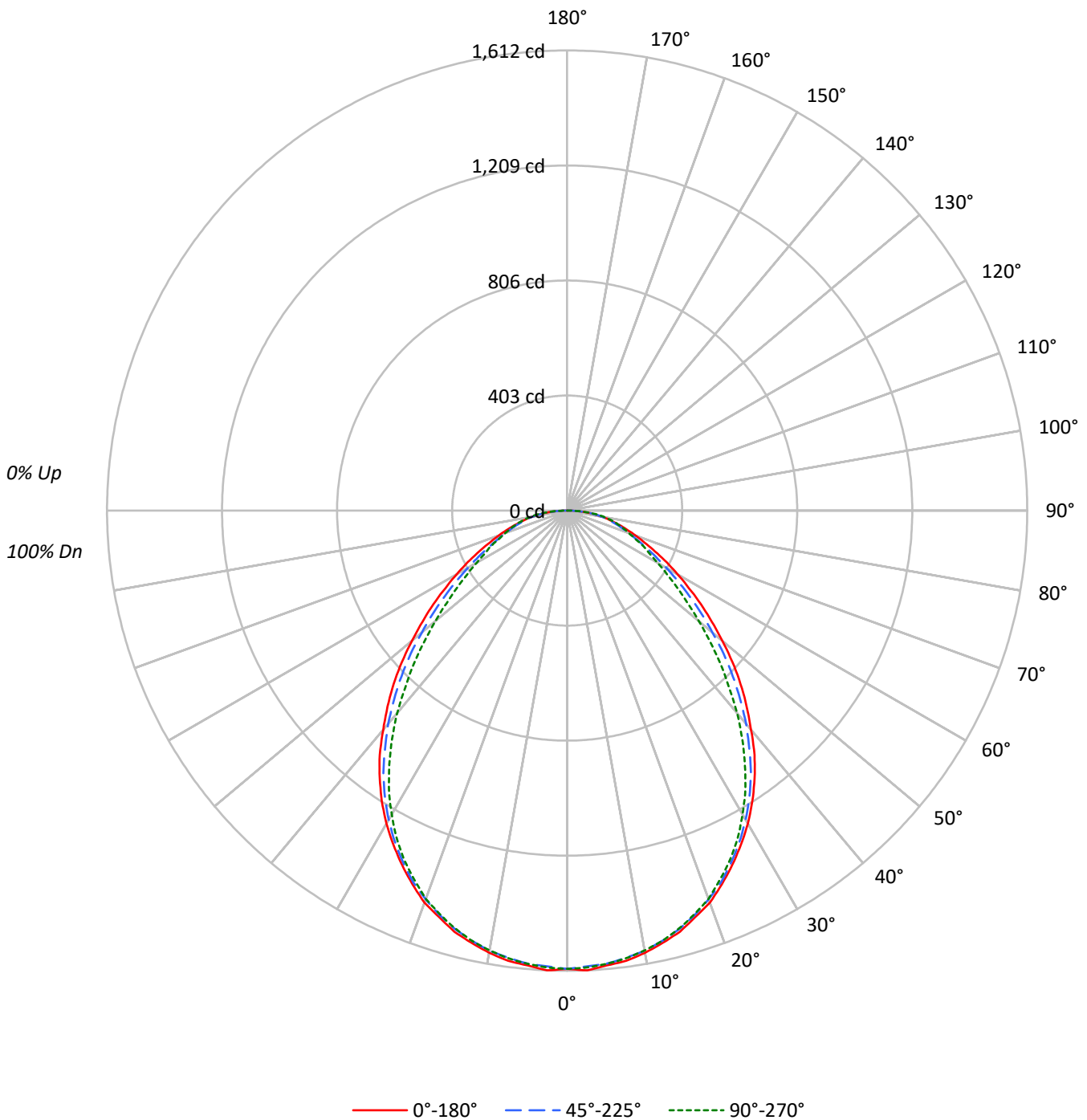
Input Watts (W): 29.388  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4320	4320	4320
5°	4319	4304	4306
10°	4298	4277	4275
15°	4254	4229	4222
20°	4185	4150	4145
25°	4065	4038	4009
30°	3933	3885	3819
35°	3761	3688	3567
40°	3521	3424	3254
45°	3270	3124	2896
50°	2967	2782	2521
55°	2684	2457	2204
60°	2409	2154	1964
65°	2162	1923	1881
70°	1996	1790	1809
75°	1906	1796	1897
80°	1928	1915	2067
85°	1995	1970	2198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.6	4.2
10°-20°	428.5	12.0
20°-30°	625.7	17.5
30°-40°	697.3	19.5
40°-50°	628.3	17.6
50°-60°	469.6	13.2
60°-70°	309.8	8.7
70°-80°	189.1	5.3
80°-90°	70.2	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°	1205.8	33.8
0°-40°	1903.1	53.3
0°-60°	3000.9	84.1
0°-90°	3570.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3570.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1599	1597	1593	1601	1594	152
15°	1527	1521	1518	1527	1516	430
25°	1369	1364	1360	1362	1350	630
35°	1145	1135	1123	1103	1086	714
45°	859	850	821	783	761	661
55°	572	563	524	480	470	512
65°	340	329	302	290	295	340
75°	183	180	173	178	182	196
85°	65	62	64	70	71	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1605.5	1605.5	1605.5	1605.5	1605.5
2.5°	1612.1	1604.7	1598.2	1608.0	1602.2
5°	1599.0	1597.3	1593.2	1601.4	1594.1
7.5°	1590.8	1585.1	1580.2	1590.0	1581.8
10°	1572.8	1569.5	1565.4	1573.6	1564.6
12.5°	1550.7	1547.4	1543.3	1553.1	1543.3
15°	1527.0	1521.2	1518.0	1527.0	1515.5
17.5°	1492.6	1490.1	1485.2	1494.2	1482.8
20°	1461.5	1452.5	1449.2	1455.8	1447.6
22.5°	1416.5	1409.9	1409.1	1413.2	1399.3
25°	1369.0	1364.1	1360.0	1362.5	1350.2
27.5°	1319.1	1312.6	1307.7	1306.8	1293.7
30°	1265.9	1257.7	1250.4	1243.8	1229.1
32.5°	1207.8	1198.0	1188.2	1177.5	1162.0
35°	1144.8	1135.0	1122.7	1103.1	1085.9
37.5°	1078.5	1067.1	1047.4	1024.5	1007.3
40°	1002.4	996.7	974.6	945.1	926.3
42.5°	931.2	924.7	896.9	864.1	838.8
45°	859.2	850.2	820.8	783.1	761.0
47.5°	785.6	776.6	743.8	697.2	677.6
50°	708.7	703.7	664.5	621.9	602.3
52.5°	638.3	632.6	592.5	549.9	531.9
55°	572.0	563.0	523.7	480.3	469.7
57.5°	505.7	495.9	459.1	422.2	414.9
60°	447.6	435.3	400.2	371.5	365.0
62.5°	392.8	378.9	349.4	327.3	324.0
65°	339.6	329.0	302.0	289.7	295.4
67.5°	293.8	283.1	263.5	258.6	256.9
70°	253.7	243.9	227.5	229.1	229.9
72.5°	216.9	211.1	198.8	202.9	206.2
75°	183.3	180.0	172.7	178.4	182.5
77.5°	153.0	150.6	147.3	152.2	158.8
80°	124.4	122.7	123.6	126.8	133.4
82.5°	95.7	92.5	94.9	101.5	105.6
85°	64.6	62.2	63.8	70.4	71.2
87.5°	30.3	30.3	29.5	34.4	34.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)