

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: P290588

Luminaire Tested: **14GR-LD5-43-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290588  
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-LD5-43-F1-UNV-L83050-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: 4362.9 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

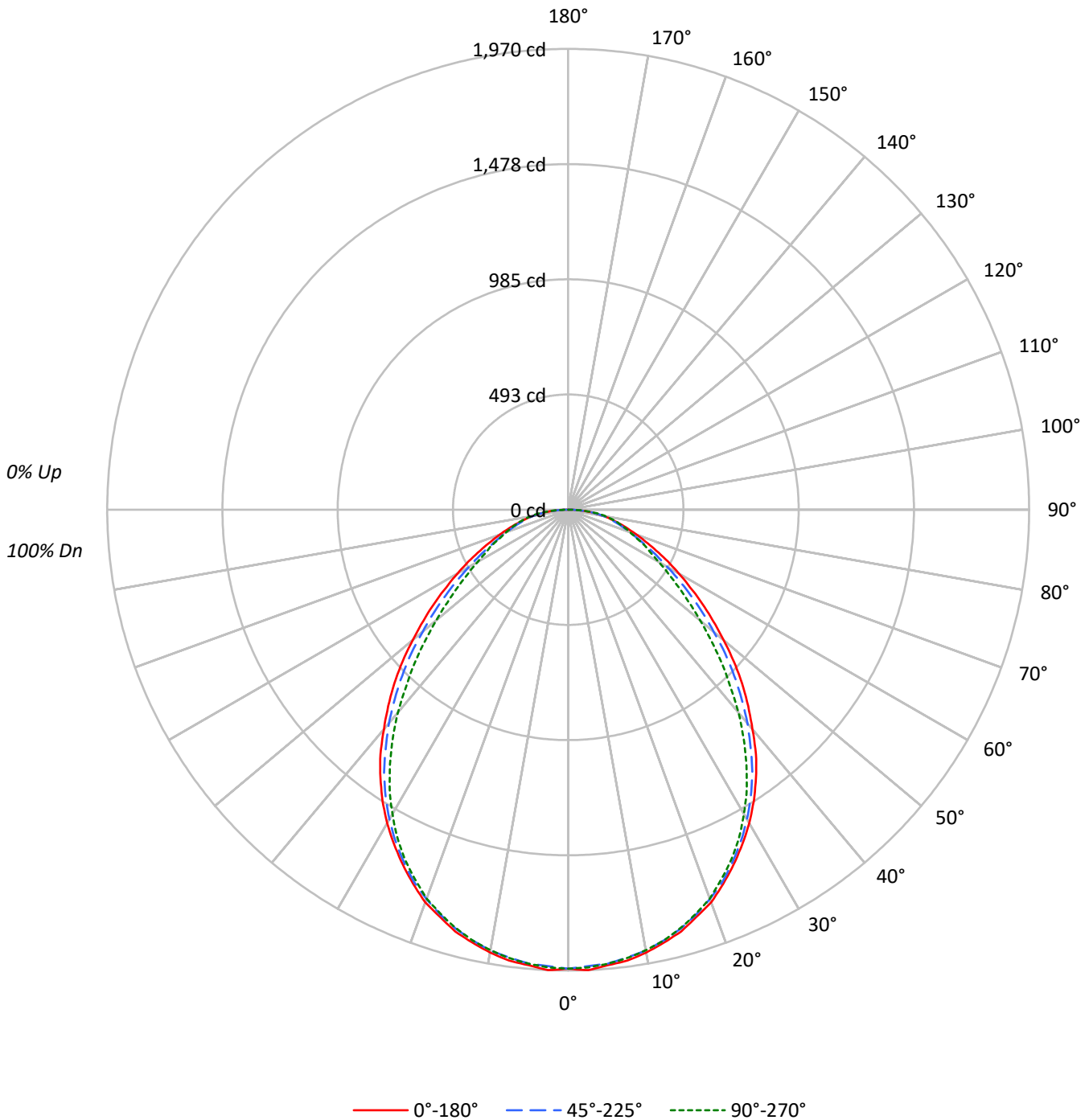
Input Watts (W): 36.549  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5280	5280	5280
5°	5279	5260	5263
10°	5252	5228	5225
15°	5199	5168	5160
20°	5115	5072	5066
25°	4968	4935	4899
30°	4807	4748	4667
35°	4596	4507	4360
40°	4304	4184	3977
45°	3996	3817	3540
50°	3626	3400	3082
55°	3280	3003	2693
60°	2944	2632	2400
65°	2642	2350	2299
70°	2439	2187	2211
75°	2329	2194	2319
80°	2356	2340	2526
85°	2439	2408	2686



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.2	4.2
10°-20°	523.7	12.0
20°-30°	764.7	17.5
30°-40°	852.2	19.5
40°-50°	767.8	17.6
50°-60°	573.9	13.2
60°-70°	378.6	8.7
70°-80°	231.1	5.3
80°-90°	85.7	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°	1473.6	33.8
0°-40°	2325.8	53.3
0°-60°	3667.5	84.1
0°-90°	4362.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4362.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1962	1962	1962	1962	1962	
5°	1954	1952	1947	1957	1948	186
15°	1866	1859	1855	1866	1852	525
25°	1673	1667	1662	1665	1650	770
35°	1399	1387	1372	1348	1327	872
45°	1050	1039	1003	957	930	808
55°	699	688	640	587	574	626
65°	415	402	369	354	361	416
75°	224	220	211	218	223	239
85°	79	76	78	86	87	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1962.2	1962.2	1962.2	1962.2	1962.2
2.5°	1970.2	1961.2	1953.2	1965.2	1958.2
5°	1954.2	1952.2	1947.2	1957.2	1948.2
7.5°	1944.1	1937.1	1931.1	1943.1	1933.1
10°	1922.1	1918.1	1913.1	1923.1	1912.1
12.5°	1895.1	1891.1	1886.1	1898.1	1886.1
15°	1866.1	1859.1	1855.1	1866.1	1852.1
17.5°	1824.1	1821.1	1815.1	1826.1	1812.1
20°	1786.1	1775.1	1771.1	1779.1	1769.1
22.5°	1731.1	1723.1	1722.1	1727.1	1710.1
25°	1673.1	1667.1	1662.1	1665.1	1650.1
27.5°	1612.1	1604.1	1598.1	1597.1	1581.1
30°	1547.1	1537.1	1528.1	1520.1	1502.1
32.5°	1476.1	1464.1	1452.1	1439.1	1420.1
35°	1399.1	1387.1	1372.1	1348.1	1327.1
37.5°	1318.1	1304.1	1280.1	1252.1	1231.1
40°	1225.1	1218.1	1191.1	1155.1	1132.1
42.5°	1138.1	1130.1	1096.1	1056.1	1025.1
45°	1050.1	1039.1	1003.1	957.1	930.1
47.5°	960.1	949.1	909.1	852.1	828.1
50°	866.1	860.1	812.1	760.1	736.1
52.5°	780.1	773.1	724.1	672.1	650.1
55°	699.1	688.1	640.0	587.0	574.0
57.5°	618.0	606.0	561.0	516.0	507.0
60°	547.0	532.0	489.0	454.0	446.0
62.5°	480.0	463.0	427.0	400.0	396.0
65°	415.0	402.0	369.0	354.0	361.0
67.5°	359.0	346.0	322.0	316.0	314.0
70°	310.0	298.0	278.0	280.0	281.0
72.5°	265.0	258.0	243.0	248.0	252.0
75°	224.0	220.0	211.0	218.0	223.0
77.5°	187.0	184.0	180.0	186.0	194.0
80°	152.0	150.0	151.0	155.0	163.0
82.5°	117.0	113.0	116.0	124.0	129.0
85°	79.0	76.0	78.0	86.0	87.0
87.5°	37.0	37.0	36.0	42.0	42.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)