

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: P291427

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-5500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4135.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

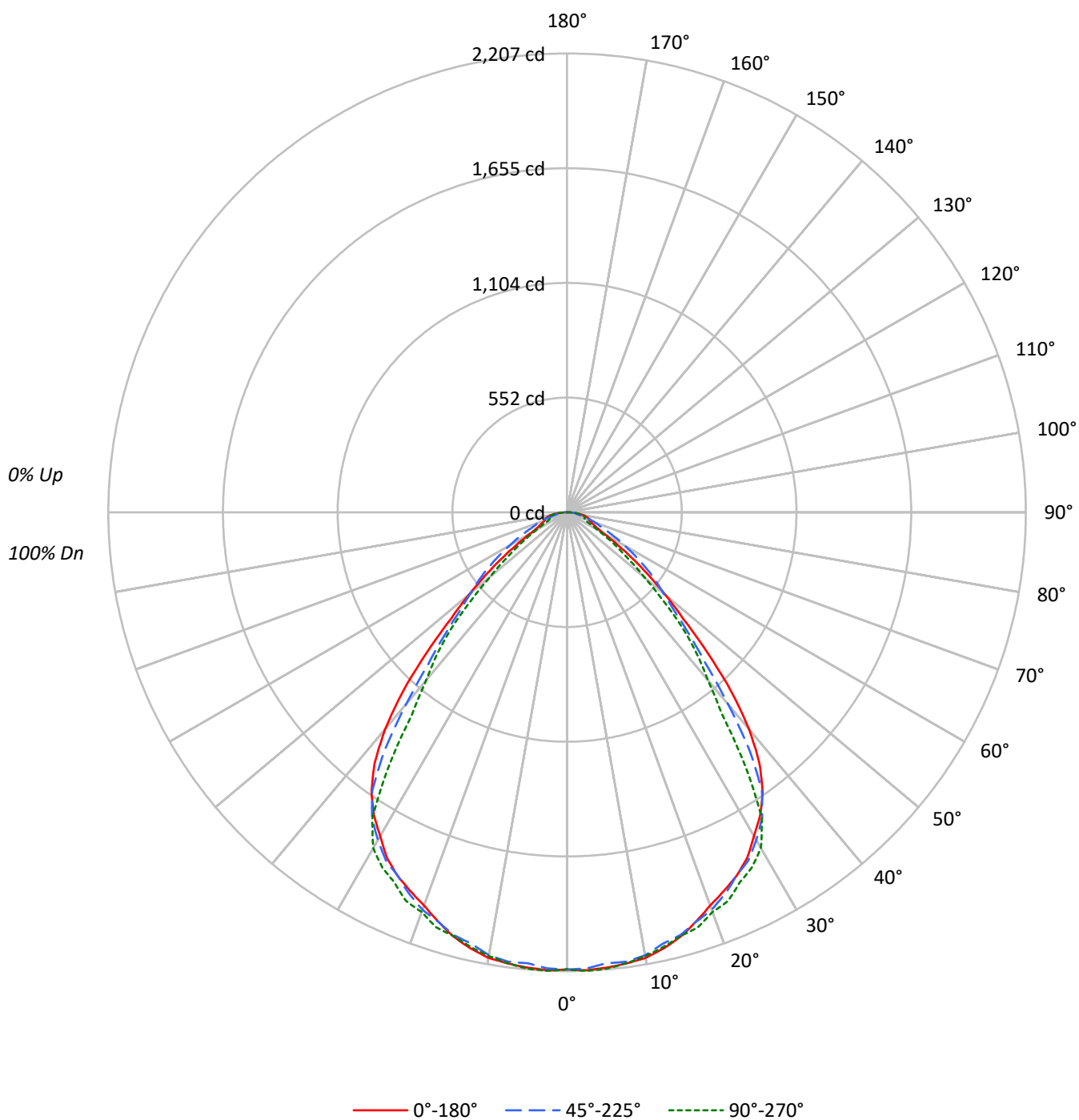
Input Watts (W): 34.596
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93			93
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71			77
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63			71
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57			65
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51			60
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46			55
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42			51
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38			48
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5917	5917	5917
5°	5937	5881	5950
10°	5946	5910	5920
15°	5886	5865	5878
20°	5763	5825	5858
25°	5728	5725	5834
30°	5588	5656	5794
35°	5389	5367	4932
40°	4785	4223	3698
45°	3631	3159	2990
50°	2576	2528	2029
55°	1763	2158	1394
60°	1090	1722	932
65°	898	1326	675
70°	894	1154	692
75°	1073	827	925
80°	1232	762	1159
85°	1170	1343	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.6	5.0
10°-20°	595.5	14.4
20°-30°	895.5	21.7
30°-40°	976.2	23.6
40°-50°	683.6	16.5
50°-60°	386.9	9.4
60°-70°	211.7	5.1
70°-80°	128.3	3.1
80°-90°	48.6	1.2
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°	1699.6	41.1
0°-40°	2675.8	64.7
0°-60°	3746.3	90.6
0°-90°	4135.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4135.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2199	2199	2199	2199	2199	
5°	2198	2194	2177	2203	2203	209
15°	2113	2107	2105	2135	2110	594
25°	1929	1933	1928	1973	1965	886
35°	1640	1633	1634	1550	1501	1011
45°	954	996	830	820	786	741
55°	376	450	460	456	297	344
65°	141	232	208	263	106	145
75°	103	149	80	156	89	107
85°	38	62	44	53	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2198.8	2198.8	2198.8	2198.8	2198.8
2.5°	2204.5	2201.7	2195.0	2208.3	2207.4
5°	2197.9	2194.1	2177.1	2202.6	2202.6
7.5°	2188.4	2179.0	2179.9	2194.1	2187.5
10°	2176.1	2160.0	2162.9	2166.6	2166.6
12.5°	2147.7	2132.6	2125.0	2137.3	2141.1
15°	2112.7	2107.0	2105.1	2135.4	2109.9
17.5°	2063.5	2075.8	2064.4	2089.0	2092.8
20°	2012.4	2036.0	2034.1	2051.2	2045.5
22.5°	1970.7	1985.9	1985.9	2006.7	2023.7
25°	1929.1	1932.9	1928.1	1972.6	1965.0
27.5°	1875.1	1872.3	1887.4	1910.1	1925.3
30°	1798.4	1799.4	1820.2	1850.5	1864.7
32.5°	1728.4	1719.9	1745.4	1758.7	1743.5
35°	1640.4	1632.8	1633.7	1550.4	1501.2
37.5°	1520.2	1526.8	1439.7	1287.3	1222.9
40°	1362.1	1375.3	1202.1	1088.5	1052.6
42.5°	1170.9	1174.7	985.4	948.4	924.8
45°	954.1	995.8	830.1	819.7	785.6
47.5°	756.3	833.9	695.7	702.3	620.9
50°	615.3	692.9	603.9	606.7	484.6
52.5°	486.5	562.2	532.9	524.4	380.5
55°	375.8	449.6	460.0	456.2	297.2
57.5°	276.4	355.9	386.2	400.4	229.1
60°	202.6	290.6	319.9	348.3	173.2
62.5°	160.9	251.8	262.2	303.8	134.4
65°	141.0	231.9	208.2	263.1	106.0
67.5°	125.9	220.5	169.4	232.9	92.8
70°	113.6	198.8	146.7	208.2	88.0
72.5°	113.6	174.2	115.5	184.6	89.0
75°	103.2	148.6	79.5	156.2	89.0
77.5°	91.8	126.8	59.6	126.8	83.3
80°	79.5	99.4	49.2	97.5	74.8
82.5°	58.7	74.8	42.6	72.9	60.6
85°	37.9	61.5	43.5	53.0	42.6
87.5°	18.0	31.2	27.4	26.5	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)