

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: P291372

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291372
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-LD5-43-A19/156-UNV-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4242.0 lumens
Efficiency: N/A
Efficacy: 116.1 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

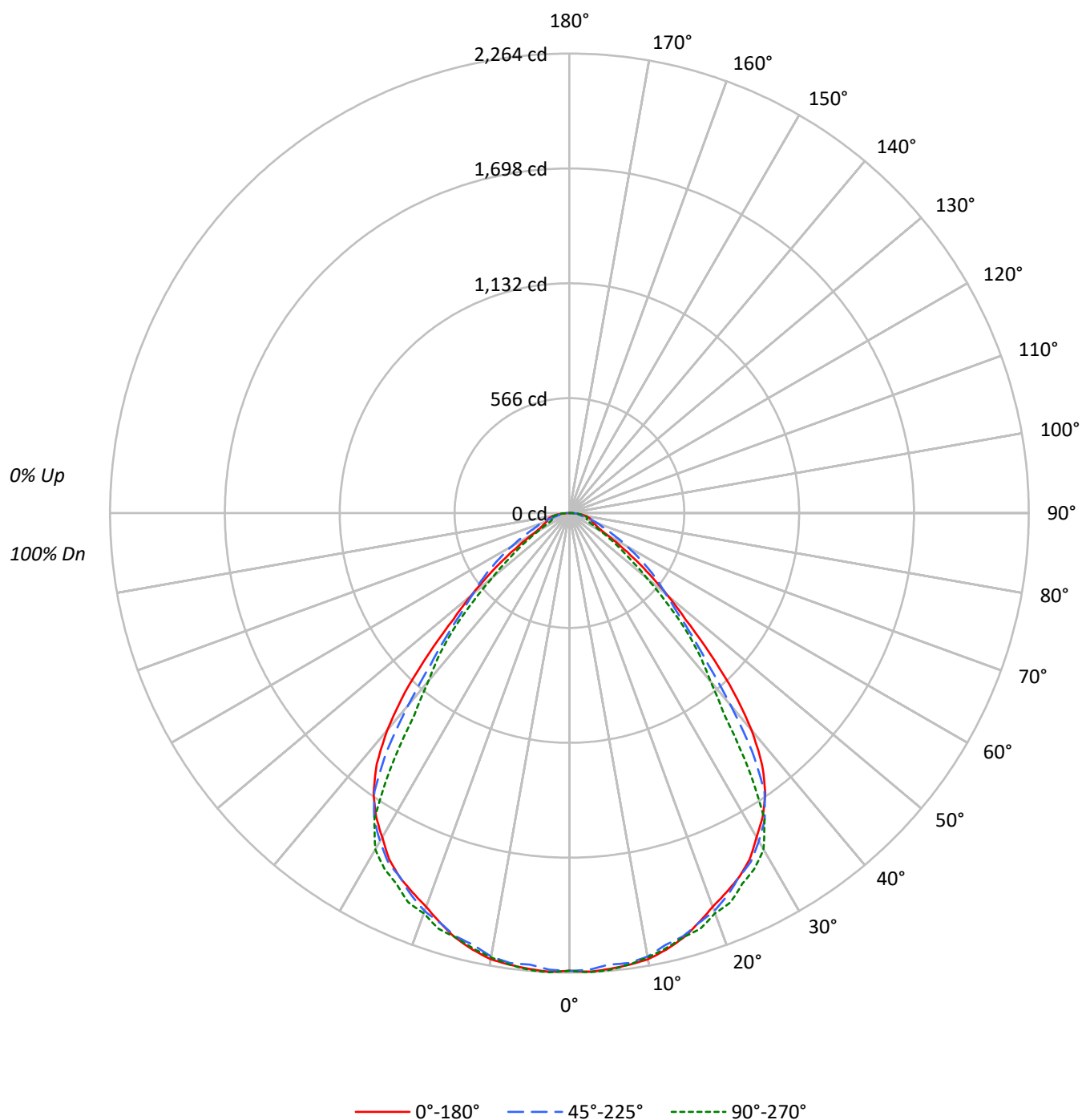
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	6070	6070	6070
5°	6091	6033	6104
10°	6100	6063	6074
15°	6038	6016	6030
20°	5912	5976	6009
25°	5876	5873	5986
30°	5733	5802	5944
35°	5528	5506	5059
40°	4908	4332	3793
45°	3725	3241	3067
50°	2642	2593	2081
55°	1809	2214	1430
60°	1118	1766	956
65°	921	1360	693
70°	917	1184	710
75°	1100	848	949
80°	1265	783	1189
85°	1198	1380	1349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	5.0
10°-20°	610.9	14.4
20°-30°	918.7	21.7
30°-40°	1001.5	23.6
40°-50°	701.3	16.5
50°-60°	396.9	9.4
60°-70°	217.2	5.1
70°-80°	131.6	3.1
80°-90°	49.9	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°	1743.6	41.1
0°-40°	2745.1	64.7
0°-60°	3843.3	90.6
0°-90°	4242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4242.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2256	2256	2256	2256	2256	
5°	2255	2251	2233	2260	2260	214
15°	2167	2162	2160	2191	2164	610
25°	1979	1983	1978	2024	2016	909
35°	1683	1675	1676	1591	1540	1037
45°	979	1022	852	841	806	760
55°	386	461	472	468	305	352
65°	145	238	214	270	109	149
75°	106	152	82	160	91	110
85°	39	63	45	54	44	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2255.7	2255.7	2255.7	2255.7	2255.7
2.5°	2261.6	2258.6	2251.8	2265.4	2264.5
5°	2254.8	2250.9	2233.4	2259.6	2259.6
7.5°	2245.0	2235.3	2236.3	2250.9	2244.1
10°	2232.4	2215.9	2218.8	2222.7	2222.7
12.5°	2203.3	2187.8	2180.0	2192.6	2196.5
15°	2167.4	2161.5	2159.6	2190.7	2164.5
17.5°	2116.9	2129.5	2117.8	2143.1	2147.0
20°	2064.4	2088.7	2086.8	2104.2	2098.4
22.5°	2021.7	2037.2	2037.2	2058.6	2076.1
25°	1979.0	1982.9	1978.0	2023.7	2015.9
27.5°	1923.6	1920.7	1936.3	1959.6	1975.1
30°	1845.0	1846.0	1867.3	1898.4	1913.0
32.5°	1773.1	1764.4	1790.6	1804.2	1788.7
35°	1682.8	1675.0	1676.0	1590.6	1540.1
37.5°	1559.5	1566.3	1477.0	1320.6	1254.6
40°	1397.3	1410.9	1233.2	1116.7	1079.8
42.5°	1201.2	1205.1	1010.9	973.0	948.7
45°	978.8	1021.5	851.6	840.9	806.0
47.5°	775.9	855.5	713.7	720.5	637.0
50°	631.2	710.8	619.5	622.4	497.2
52.5°	499.1	576.8	546.7	538.0	390.4
55°	385.5	461.2	471.9	468.0	304.9
57.5°	283.5	365.1	396.2	410.8	235.0
60°	207.8	298.1	328.2	357.3	177.7
62.5°	165.1	258.3	269.0	311.7	137.9
65°	144.7	237.9	213.6	269.9	108.8
67.5°	129.1	226.3	173.8	238.9	95.2
70°	116.5	203.9	150.5	213.6	90.3
72.5°	116.5	178.7	118.5	189.4	91.3
75°	105.8	152.5	81.6	160.2	91.3
77.5°	94.2	130.1	61.2	130.1	85.5
80°	81.6	102.0	50.5	100.0	76.7
82.5°	60.2	76.7	43.7	74.8	62.1
85°	38.8	63.1	44.7	54.4	43.7
87.5°	18.4	32.0	28.2	27.2	22.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)