

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: P291371

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291371
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-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4009.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

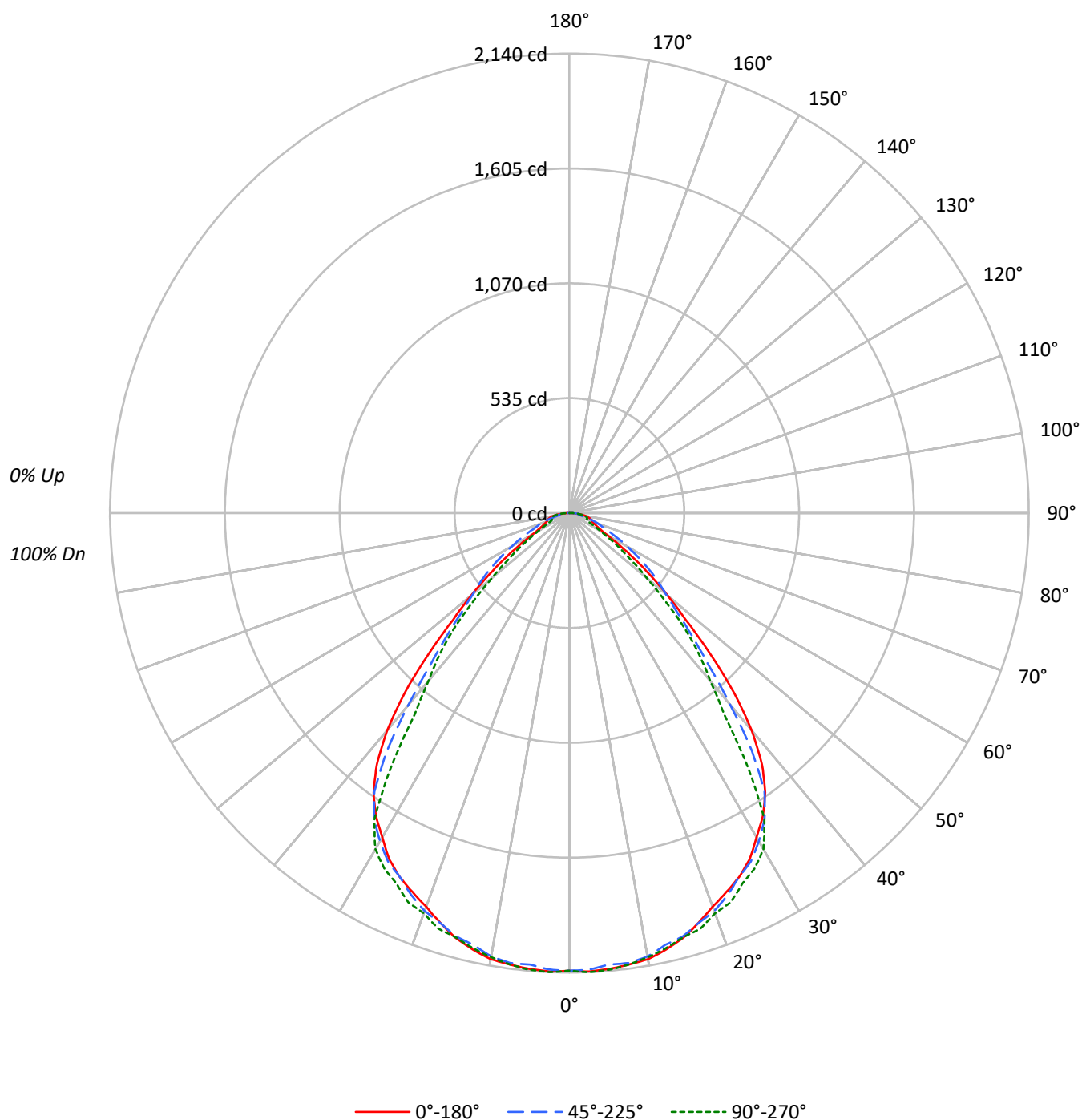
Input Watts (W): 36.456
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5737	5737	5737
5°	5756	5702	5769
10°	5765	5730	5740
15°	5706	5686	5699
20°	5587	5647	5679
25°	5553	5551	5657
30°	5418	5483	5618
35°	5225	5204	4781
40°	4639	4094	3585
45°	3520	3063	2899
50°	2497	2451	1967
55°	1709	2092	1352
60°	1057	1669	904
65°	870	1286	655
70°	866	1119	671
75°	1040	802	897
80°	1195	739	1124
85°	1133	1303	1275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.3	5.0
10°-20°	577.3	14.4
20°-30°	868.2	21.7
30°-40°	946.5	23.6
40°-50°	662.7	16.5
50°-60°	375.1	9.4
60°-70°	205.3	5.1
70°-80°	124.4	3.1
80°-90°	47.2	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°	1647.8	41.1
0°-40°	2594.3	64.7
0°-60°	3632.1	90.6
0°-90°	4009.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4009.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2132	2132	2132	2132	2132	
5°	2131	2127	2111	2136	2136	203
15°	2048	2043	2041	2070	2046	576
25°	1870	1874	1869	1912	1905	859
35°	1590	1583	1584	1503	1456	980
45°	925	965	805	795	762	718
55°	364	436	446	442	288	333
65°	137	225	202	255	103	140
75°	100	144	77	151	86	104
85°	37	60	42	51	41	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2131.8	2131.8	2131.8	2131.8	2131.8
2.5°	2137.3	2134.6	2128.2	2141.0	2140.1
5°	2130.9	2127.2	2110.7	2135.5	2135.5
7.5°	2121.7	2112.6	2113.5	2127.2	2120.8
10°	2109.8	2094.2	2097.0	2100.6	2100.6
12.5°	2082.3	2067.6	2060.2	2072.2	2075.9
15°	2048.3	2042.8	2041.0	2070.3	2045.6
17.5°	2000.6	2012.5	2001.5	2025.4	2029.0
20°	1951.0	1974.0	1972.1	1988.7	1983.2
22.5°	1910.7	1925.3	1925.3	1945.5	1962.1
25°	1870.3	1874.0	1869.4	1912.5	1905.2
27.5°	1818.0	1815.2	1829.9	1851.9	1866.6
30°	1743.6	1744.6	1764.7	1794.1	1807.9
32.5°	1675.7	1667.5	1692.2	1705.1	1690.4
35°	1590.4	1583.0	1584.0	1503.2	1455.5
37.5°	1473.8	1480.3	1395.8	1248.1	1185.7
40°	1320.6	1333.4	1165.5	1055.4	1020.5
42.5°	1135.2	1138.9	955.3	919.5	896.6
45°	925.0	965.4	804.8	794.7	761.7
47.5°	733.2	808.5	674.5	680.9	602.0
50°	596.5	671.8	585.5	588.2	469.9
52.5°	471.7	545.1	516.7	508.4	368.9
55°	364.3	435.9	446.0	442.3	288.2
57.5°	268.0	345.1	374.4	388.2	222.1
60°	196.4	281.7	310.2	337.7	167.9
62.5°	156.0	244.1	254.2	294.6	130.3
65°	136.7	224.8	201.9	255.1	102.8
67.5°	122.1	213.8	164.3	225.8	89.9
70°	110.1	192.7	142.2	201.9	85.3
72.5°	110.1	168.9	112.0	179.0	86.3
75°	100.0	144.1	77.1	151.4	86.3
77.5°	89.0	123.0	57.8	123.0	80.8
80°	77.1	96.4	47.7	94.5	72.5
82.5°	56.9	72.5	41.3	70.7	58.7
85°	36.7	59.7	42.2	51.4	41.3
87.5°	17.4	30.3	26.6	25.7	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)