

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: P294130

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-5500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4430.0 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

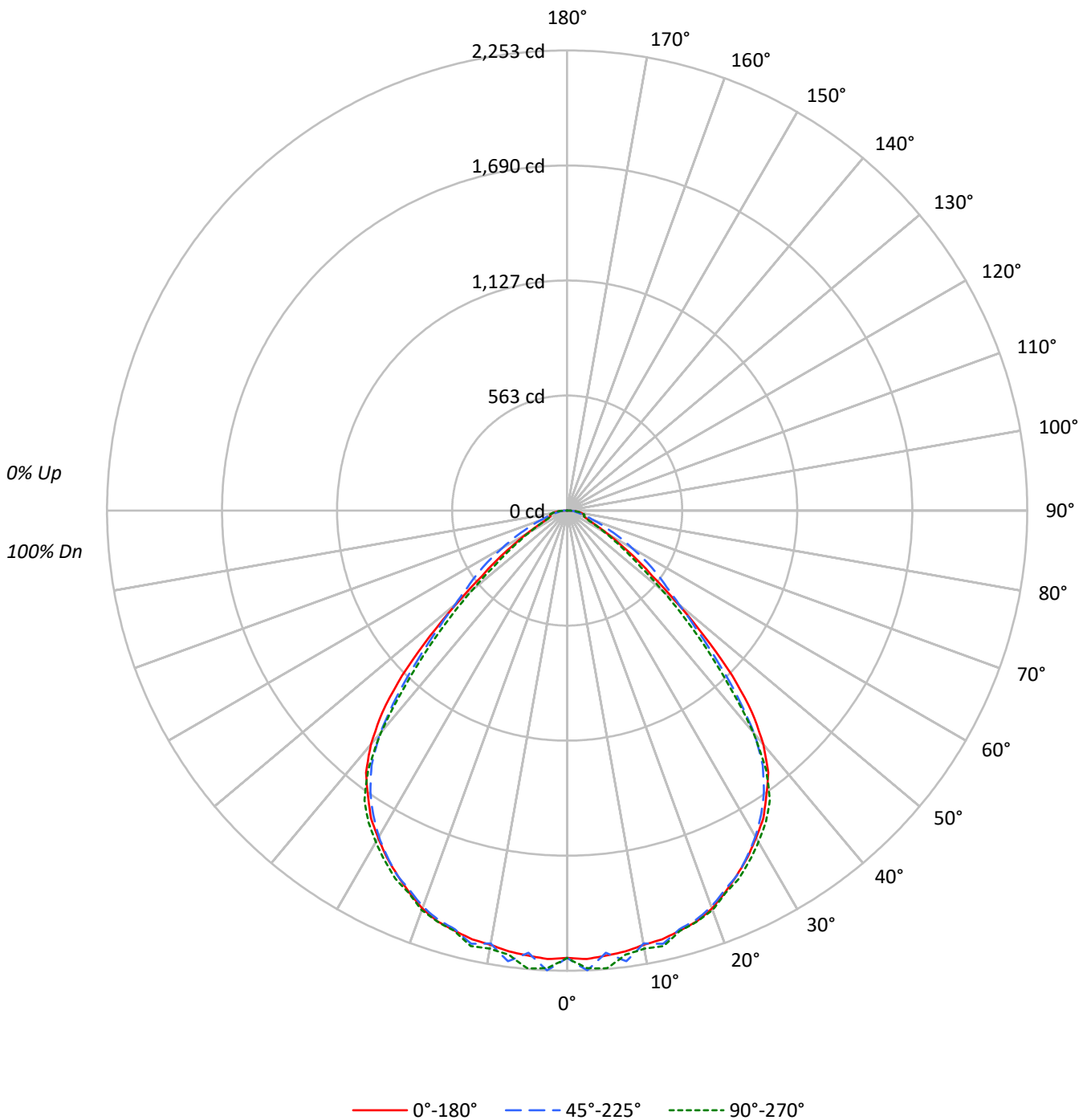
Input Watts (W): 33.759
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41		51	45	41		50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38		48	42	37		47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34		44	38	34		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2947	2947	2947
5°	2954	2935	3038
10°	2949	2940	2976
15°	2966	2956	2968
20°	2968	2956	2981
25°	2922	2925	2953
30°	2874	2865	2911
35°	2793	2759	2842
40°	2623	2505	2492
45°	2174	1967	1866
50°	1462	1492	1275
55°	965	1252	836
60°	618	988	572
65°	399	754	387
70°	352	540	352
75°	455	429	459
80°	557	370	584
85°	648	550	681



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.7	4.7
10°-20°	602.2	13.6
20°-30°	906.6	20.5
30°-40°	1050.9	23.7
40°-50°	820.9	18.5
50°-60°	438.3	9.9
60°-70°	225.4	5.1
70°-80°	127.5	2.9
80°-90°	48.4	1.1
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°	1718.6	38.8
0°-40°	2769.4	62.5
0°-60°	4028.7	90.9
0°-90°	4430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2190	2190	2190	2190	2190	
5°	2187	2248	2173	2232	2250	208
15°	2129	2143	2122	2136	2131	601
25°	1968	1962	1970	1967	1989	907
35°	1700	1692	1680	1713	1730	1060
45°	1143	1143	1034	1024	980	861
55°	411	520	534	481	356	379
65°	125	261	237	260	122	138
75°	88	164	82	154	88	89
85°	42	55	36	55	44	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2190.5	2190.5	2190.5	2190.5	2190.5
2.5°	2197.6	2237.5	2253.1	2233.9	2242.4
5°	2187.0	2248.1	2172.7	2232.5	2249.6
7.5°	2177.0	2170.6	2225.4	2168.5	2192.6
10°	2158.5	2162.8	2152.1	2192.6	2178.4
12.5°	2150.0	2174.9	2172.7	2152.1	2183.4
15°	2129.3	2142.8	2122.2	2135.7	2130.7
17.5°	2108.7	2102.3	2100.2	2105.8	2110.8
20°	2073.1	2051.8	2064.6	2066.0	2081.7
22.5°	2021.9	2009.1	2011.9	2024.7	2026.2
25°	1968.5	1962.1	1970.0	1967.1	1989.2
27.5°	1913.0	1904.5	1909.5	1920.2	1933.7
30°	1849.7	1847.6	1844.0	1853.3	1873.9
32.5°	1787.1	1770.1	1767.2	1786.4	1809.9
35°	1700.3	1692.5	1679.7	1713.1	1730.2
37.5°	1617.8	1593.6	1573.0	1592.9	1600.0
40°	1493.3	1474.8	1426.4	1428.6	1418.6
42.5°	1340.3	1326.8	1234.3	1218.0	1190.2
45°	1142.6	1143.3	1033.7	1024.5	980.4
47.5°	912.8	953.3	858.0	847.3	781.9
50°	698.6	771.9	712.9	695.8	609.0
52.5°	524.3	631.8	613.3	576.3	456.7
55°	411.2	520.1	533.6	480.9	356.4
57.5°	309.5	428.3	450.3	406.9	275.3
60°	229.8	360.7	367.1	350.0	212.7
62.5°	170.7	306.6	298.1	300.2	157.9
65°	125.2	261.1	236.9	260.4	121.7
67.5°	102.4	226.2	184.3	225.5	98.9
70°	89.6	200.6	137.3	198.5	89.6
72.5°	86.8	184.3	108.8	176.4	87.5
75°	87.5	164.3	82.5	153.7	88.2
77.5°	80.4	135.2	62.6	130.9	83.9
80°	71.9	102.4	47.7	103.9	75.4
82.5°	61.2	74.7	38.4	76.8	63.3
85°	42.0	54.8	35.6	54.8	44.1
87.5°	19.9	32.7	22.1	31.3	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)