

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: P294135

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294135
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-LD5-56-A19/156-UNV-L92765-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4692.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

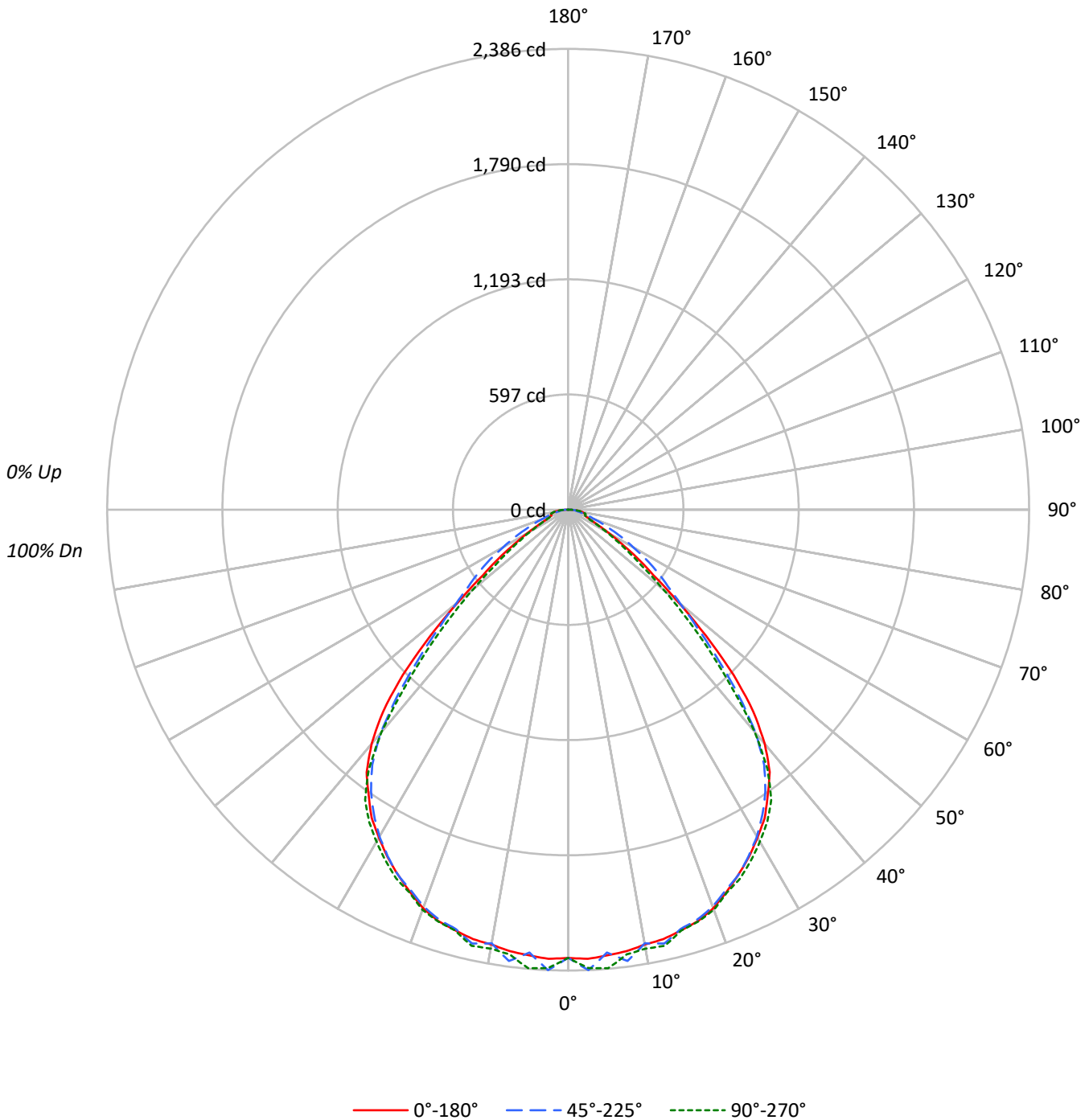
Input Watts (W): 39.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3122	3122	3122
5°	3128	3108	3218
10°	3124	3114	3152
15°	3142	3131	3144
20°	3144	3131	3157
25°	3095	3098	3128
30°	3044	3034	3084
35°	2958	2922	3010
40°	2778	2654	2639
45°	2303	2083	1976
50°	1549	1580	1350
55°	1022	1326	886
60°	655	1046	606
65°	422	799	410
70°	373	572	373
75°	482	454	486
80°	590	391	619
85°	687	582	721



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.1	4.7
10°-20°	637.8	13.6
20°-30°	960.3	20.5
30°-40°	1113.0	23.7
40°-50°	869.4	18.5
50°-60°	464.2	9.9
60°-70°	238.7	5.1
70°-80°	135.1	2.9
80°-90°	51.3	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°	1820.2	38.8
0°-40°	2933.2	62.5
0°-60°	4266.9	90.9
0°-90°	4692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2320	2320	2320	2320	2320	
5°	2316	2381	2301	2364	2383	220
15°	2255	2270	2248	2262	2257	637
25°	2085	2078	2086	2084	2107	961
35°	1801	1793	1779	1814	1832	1123
45°	1210	1211	1095	1085	1038	912
55°	436	551	565	509	378	402
65°	133	276	251	276	129	146
75°	93	174	87	163	93	94
85°	44	58	38	58	47	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2320.1	2320.1	2320.1	2320.1	2320.1
2.5°	2327.6	2369.8	2386.4	2366.0	2375.1
5°	2316.3	2381.1	2301.2	2364.5	2382.6
7.5°	2305.7	2299.0	2357.0	2296.7	2322.3
10°	2286.2	2290.7	2279.4	2322.3	2307.2
12.5°	2277.1	2303.5	2301.2	2279.4	2312.5
15°	2255.3	2269.6	2247.7	2262.0	2256.8
17.5°	2233.4	2226.6	2224.4	2230.4	2235.7
20°	2195.7	2173.1	2186.7	2188.2	2204.8
22.5°	2141.5	2127.9	2130.9	2144.5	2146.0
25°	2085.0	2078.2	2086.5	2083.5	2106.8
27.5°	2026.2	2017.1	2022.4	2033.7	2048.0
30°	1959.1	1956.9	1953.1	1962.9	1984.7
32.5°	1892.8	1874.7	1871.7	1892.1	1916.9
35°	1800.9	1792.6	1779.0	1814.5	1832.5
37.5°	1713.5	1687.9	1666.0	1687.1	1694.6
40°	1581.6	1562.0	1510.8	1513.0	1502.5
42.5°	1419.6	1405.3	1307.3	1290.0	1260.6
45°	1210.1	1210.9	1094.9	1085.1	1038.3
47.5°	966.8	1009.7	908.7	897.4	828.1
50°	739.9	817.6	755.0	736.9	645.0
52.5°	555.3	669.1	649.5	610.3	483.8
55°	435.5	550.8	565.1	509.4	377.5
57.5°	327.8	453.6	477.0	431.0	291.6
60°	243.4	382.0	388.8	370.7	225.3
62.5°	180.8	324.8	315.7	318.0	167.3
65°	132.6	276.5	250.9	275.8	128.9
67.5°	108.5	239.6	195.2	238.9	104.7
70°	94.9	212.5	145.4	210.2	94.9
72.5°	91.9	195.2	115.3	186.9	92.7
75°	92.7	174.1	87.4	162.8	93.4
77.5°	85.1	143.2	66.3	138.6	88.9
80°	76.1	108.5	50.5	110.0	79.9
82.5°	64.8	79.1	40.7	81.4	67.1
85°	44.5	58.0	37.7	58.0	46.7
87.5°	21.1	34.7	23.4	33.2	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)