

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: P293439

Luminaire Tested: **24GR-LD5-56-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-A-UNV-L83050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5701.0 lumens
Efficiency: N/A
Efficacy: 146.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

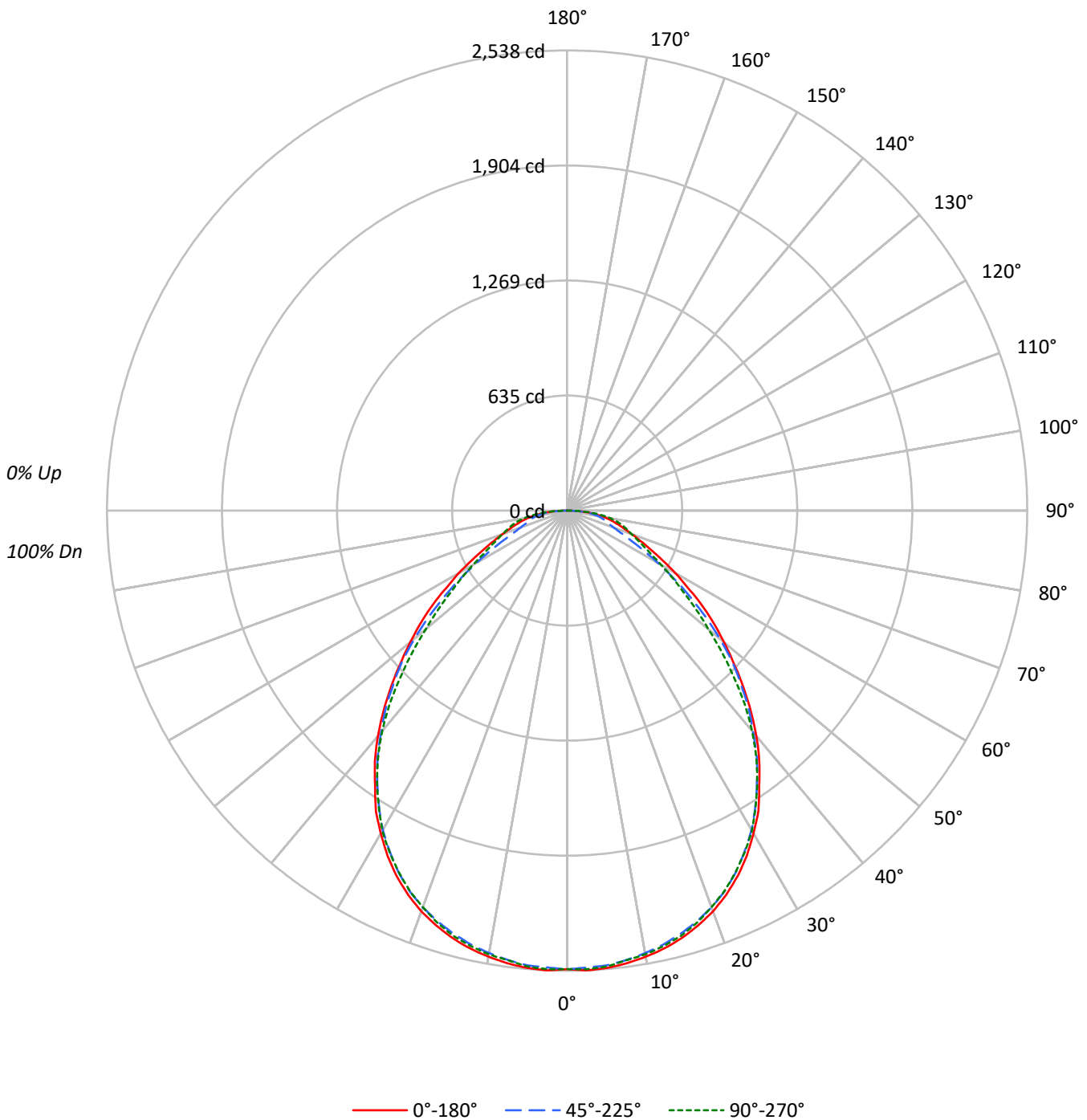
Input Watts (W): 38.967
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3403	3403	3403
5°	3420	3401	3409
10°	3414	3386	3396
15°	3401	3366	3381
20°	3368	3334	3333
25°	3303	3268	3265
30°	3194	3161	3168
35°	3034	2999	3003
40°	2853	2803	2786
45°	2614	2579	2477
50°	2363	2299	2126
55°	2122	1932	1833
60°	1858	1555	1612
65°	1621	1223	1483
70°	1483	1067	1483
75°	1484	1135	1634
80°	1611	1337	1863
85°	1768	1510	1999



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.5	4.2
10°-20°	683.6	12.0
20°-30°	1013.6	17.8
30°-40°	1143.5	20.1
40°-50°	1035.6	18.2
50°-60°	747.2	13.1
60°-70°	446.1	7.8
70°-80°	275.7	4.8
80°-90°	116.2	2.0
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°	1936.7	34.0
0°-40°	3080.2	54.0
0°-60°	4863.0	85.3
0°-90°	5701.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5701.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2530	2530	2530	2530	2530	
5°	2532	2529	2518	2515	2524	241
15°	2441	2426	2417	2418	2427	688
25°	2225	2212	2201	2193	2199	1022
35°	1847	1844	1826	1827	1828	1156
45°	1374	1365	1355	1322	1302	1059
55°	904	876	824	783	781	807
65°	509	448	384	436	466	512
75°	285	248	218	272	314	305
85°	114	100	98	128	130	120
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2529.5	2529.5	2529.5	2529.5	2529.5
2.5°	2538.3	2531.2	2522.4	2527.7	2532.1
5°	2532.1	2528.6	2518.0	2515.4	2524.2
7.5°	2518.9	2510.1	2500.4	2504.8	2501.3
10°	2498.6	2490.7	2478.4	2479.3	2485.4
12.5°	2474.0	2464.3	2451.1	2454.6	2459.9
15°	2441.4	2426.4	2416.7	2417.6	2427.3
17.5°	2400.0	2388.6	2376.2	2378.9	2383.3
20°	2352.4	2346.3	2328.7	2323.4	2327.8
22.5°	2292.6	2281.1	2271.4	2268.8	2269.7
25°	2224.7	2212.4	2201.0	2193.0	2199.2
27.5°	2145.5	2134.9	2119.9	2117.3	2122.6
30°	2055.6	2047.7	2034.5	2031.0	2038.9
32.5°	1964.0	1950.8	1932.3	1932.3	1934.1
35°	1846.9	1844.3	1825.8	1826.6	1828.4
37.5°	1741.2	1728.9	1718.3	1707.7	1713.0
40°	1624.1	1610.0	1595.9	1588.8	1586.2
42.5°	1498.1	1487.6	1481.4	1455.9	1449.7
45°	1373.9	1365.1	1355.4	1322.0	1301.7
47.5°	1247.1	1245.4	1237.4	1178.4	1158.2
50°	1129.1	1126.5	1098.3	1035.7	1015.5
52.5°	1017.2	999.6	962.6	901.0	897.5
55°	904.5	876.3	823.5	783.0	781.2
57.5°	785.6	752.1	698.4	676.4	687.9
60°	690.5	639.4	577.8	580.4	598.9
62.5°	591.9	534.6	473.8	500.3	522.3
65°	509.1	448.3	384.0	436.0	465.9
67.5°	436.8	380.5	318.8	388.4	417.5
70°	377.0	331.2	271.3	344.4	377.0
72.5°	329.4	287.1	240.4	309.1	347.0
75°	285.4	247.5	218.4	272.1	314.4
77.5°	247.5	210.5	197.3	240.4	281.8
80°	207.9	174.4	172.6	209.6	240.4
82.5°	162.1	139.2	139.2	175.3	193.8
85°	114.5	100.4	97.8	127.7	129.5
87.5°	59.0	56.4	51.1	66.9	66.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)