

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: P293557

Luminaire Tested: **24GR-LD5-42-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293557
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-LD5-42-A-UNV-L93050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3961.1 lumens
Efficiency: N/A
Efficacy: 135.8 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

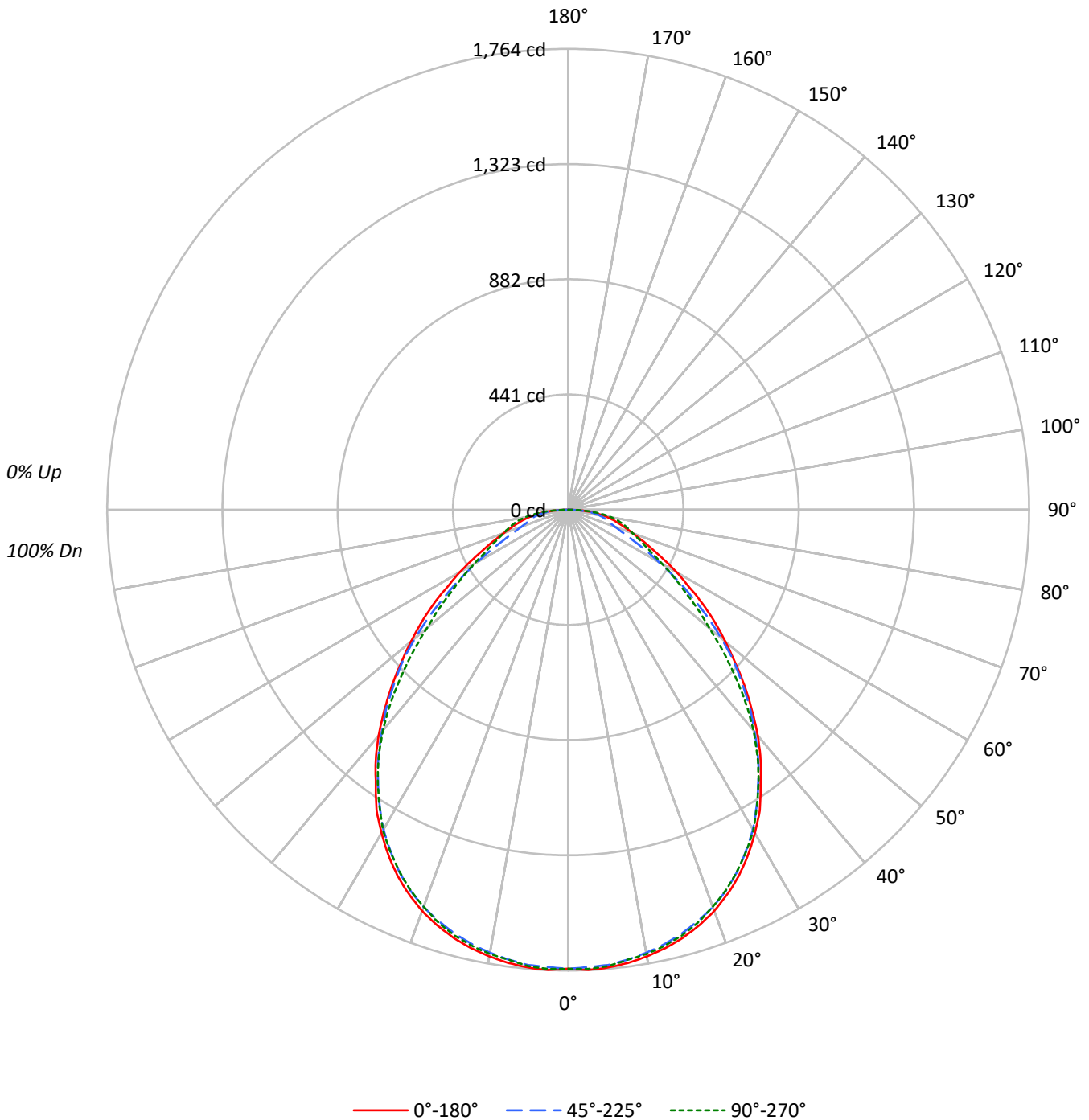
Input Watts (W): 29.168706
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2365	2365	2365
5°	2376	2363	2369
10°	2372	2353	2359
15°	2363	2339	2349
20°	2340	2317	2316
25°	2295	2270	2268
30°	2219	2196	2201
35°	2108	2084	2087
40°	1982	1948	1936
45°	1816	1792	1721
50°	1642	1597	1477
55°	1474	1342	1273
60°	1291	1080	1120
65°	1126	849	1031
70°	1030	742	1030
75°	1031	789	1136
80°	1119	929	1295
85°	1229	1048	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.4	4.2
10°-20°	474.9	12.0
20°-30°	704.2	17.8
30°-40°	794.5	20.1
40°-50°	719.6	18.2
50°-60°	519.1	13.1
60°-70°	310.0	7.8
70°-80°	191.6	4.8
80°-90°	80.7	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°	1345.6	34.0
0°-40°	2140.1	54.0
0°-60°	3378.8	85.3
0°-90°	3961.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3961.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1757	1757	1757	1757	1757	
5°	1759	1757	1750	1748	1754	167
15°	1696	1686	1679	1680	1686	478
25°	1546	1537	1529	1524	1528	710
35°	1283	1281	1268	1269	1270	803
45°	955	948	942	918	904	736
55°	628	609	572	544	543	561
65°	354	312	267	303	324	356
75°	198	172	152	189	218	212
85°	80	70	68	89	90	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1757.4	1757.4	1757.4	1757.4	1757.4
2.5°	1763.6	1758.7	1752.6	1756.2	1759.3
5°	1759.3	1756.8	1749.5	1747.7	1753.8
7.5°	1750.1	1744.0	1737.3	1740.3	1737.9
10°	1736.0	1730.5	1722.0	1722.6	1726.9
12.5°	1718.9	1712.2	1703.0	1705.4	1709.1
15°	1696.3	1685.9	1679.1	1679.7	1686.5
17.5°	1667.5	1659.5	1651.0	1652.8	1655.9
20°	1634.5	1630.2	1617.9	1614.3	1617.3
22.5°	1592.8	1584.9	1578.2	1576.3	1576.9
25°	1545.7	1537.2	1529.2	1523.7	1528.0
27.5°	1490.7	1483.3	1472.9	1471.1	1474.7
30°	1428.2	1422.7	1413.5	1411.1	1416.6
32.5°	1364.6	1355.4	1342.6	1342.6	1343.8
35°	1283.2	1281.4	1268.5	1269.1	1270.4
37.5°	1209.8	1201.2	1193.9	1186.5	1190.2
40°	1128.4	1118.6	1108.8	1103.9	1102.1
42.5°	1040.9	1033.5	1029.3	1011.5	1007.2
45°	954.6	948.5	941.8	918.5	904.4
47.5°	866.5	865.3	859.8	818.8	804.7
50°	784.5	782.7	763.1	719.6	705.5
52.5°	706.8	694.5	668.8	626.0	623.6
55°	628.4	608.9	572.2	544.0	542.8
57.5°	545.8	522.6	485.3	470.0	477.9
60°	479.7	444.3	401.4	403.3	416.1
62.5°	411.2	371.4	329.2	347.6	362.9
65°	353.7	311.5	266.8	302.9	323.7
67.5°	303.5	264.4	221.5	269.9	290.1
70°	261.9	230.1	188.5	239.3	261.9
72.5°	228.9	199.5	167.1	214.8	241.1
75°	198.3	172.0	151.8	189.1	218.5
77.5°	172.0	146.3	137.1	167.1	195.8
80°	144.4	121.2	119.9	145.6	167.1
82.5°	112.6	96.7	96.7	121.8	134.6
85°	79.6	69.8	67.9	88.7	90.0
87.5°	41.0	39.2	35.5	46.5	46.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)