

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: P293556

Luminaire Tested: **24GR-LD5-42-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293556  
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-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3893.0 lumens  
Efficiency: N/A  
Efficacy: 135.5 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

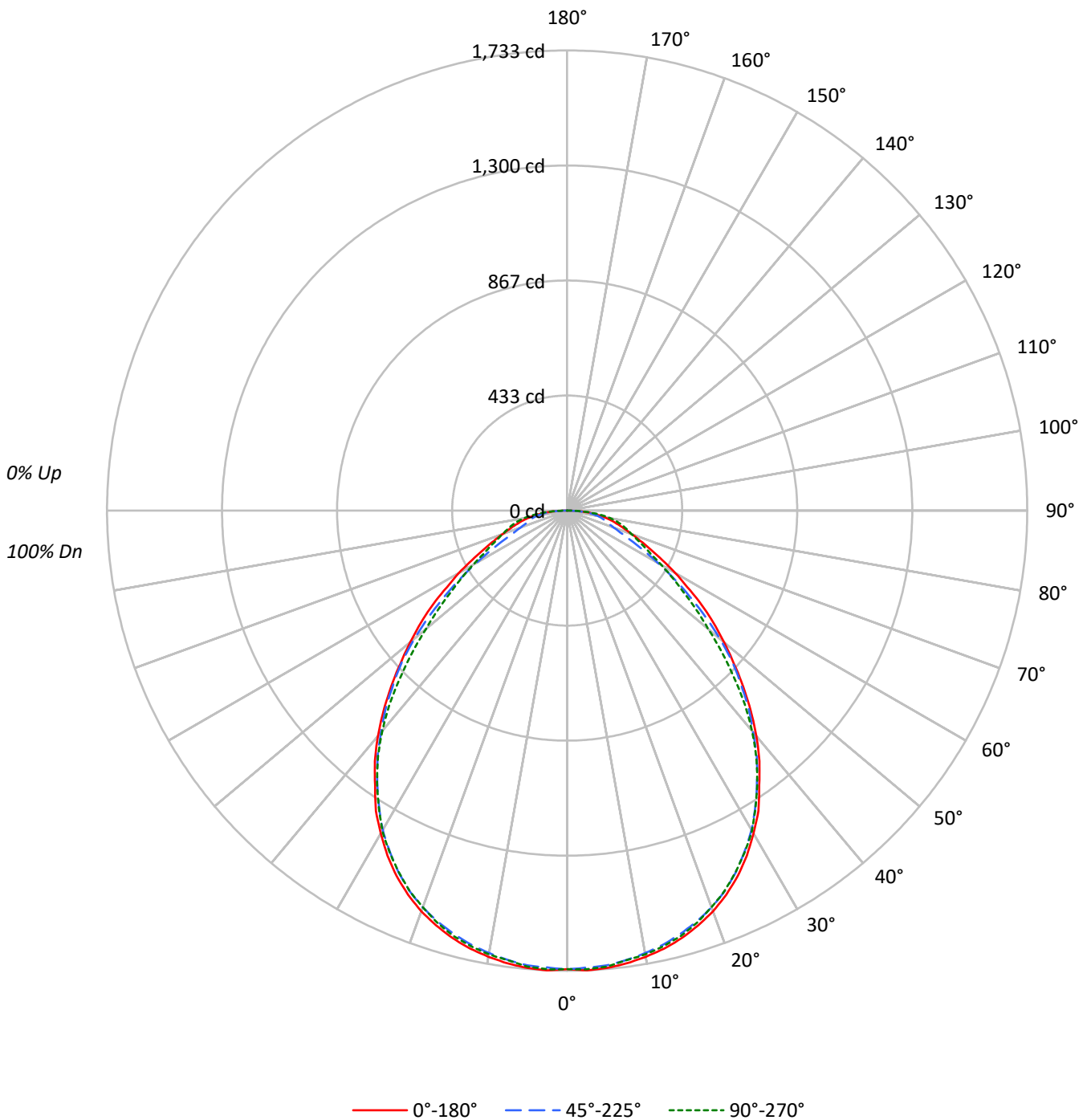
Input Watts (W): 28.720818  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2324	2324	2324
5°	2335	2322	2328
10°	2331	2312	2319
15°	2322	2299	2309
20°	2300	2277	2276
25°	2255	2231	2229
30°	2181	2158	2163
35°	2072	2048	2051
40°	1948	1914	1903
45°	1785	1761	1691
50°	1614	1570	1451
55°	1449	1319	1251
60°	1269	1062	1101
65°	1107	835	1013
70°	1013	729	1013
75°	1013	776	1116
80°	1099	914	1272
85°	1207	1031	1365



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.6	4.2
10°-20°	466.8	12.0
20°-30°	692.2	17.8
30°-40°	780.8	20.1
40°-50°	707.2	18.2
50°-60°	510.2	13.1
60°-70°	304.6	7.8
70°-80°	188.3	4.8
80°-90°	79.3	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°	1322.5	34.0
0°-40°	2103.4	54.0
0°-60°	3320.8	85.3
0°-90°	3893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1729	1727	1720	1718	1724	164
15°	1667	1657	1650	1651	1658	470
25°	1519	1511	1503	1498	1502	698
35°	1261	1259	1247	1247	1248	789
45°	938	932	926	903	889	723
55°	618	598	562	535	534	551
65°	348	306	262	298	318	350
75°	195	169	149	186	215	208
85°	78	69	67	87	88	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1727.3	1727.3	1727.3	1727.3	1727.3
2.5°	1733.3	1728.5	1722.5	1726.1	1729.1
5°	1729.1	1726.7	1719.5	1717.7	1723.7
7.5°	1720.1	1714.0	1707.4	1710.4	1708.0
10°	1706.2	1700.8	1692.4	1693.0	1697.2
12.5°	1689.4	1682.8	1673.8	1676.2	1679.8
15°	1667.1	1656.9	1650.3	1650.9	1657.5
17.5°	1638.9	1631.1	1622.6	1624.4	1627.4
20°	1606.4	1602.2	1590.2	1586.5	1589.6
22.5°	1565.5	1557.7	1551.1	1549.3	1549.9
25°	1519.2	1510.8	1502.9	1497.5	1501.7
27.5°	1465.1	1457.8	1447.6	1445.8	1449.4
30°	1403.7	1398.3	1389.3	1386.9	1392.3
32.5°	1341.2	1332.1	1319.5	1319.5	1320.7
35°	1261.2	1259.4	1246.7	1247.3	1248.5
37.5°	1189.0	1180.6	1173.4	1166.2	1169.8
40°	1109.0	1099.4	1089.8	1085.0	1083.2
42.5°	1023.0	1015.8	1011.6	994.1	989.9
45°	938.2	932.2	925.6	902.7	888.9
47.5°	851.6	850.4	845.0	804.7	790.9
50°	771.0	769.2	750.0	707.3	693.4
52.5°	694.6	682.6	657.4	615.3	612.8
55°	617.7	598.4	562.3	534.7	533.5
57.5°	536.5	513.6	476.9	461.9	469.7
60°	471.5	436.6	394.5	396.3	409.0
62.5°	404.2	365.1	323.6	341.6	356.6
65°	347.6	306.1	262.2	297.7	318.2
67.5°	298.3	259.8	217.7	265.2	285.1
70°	257.4	226.1	185.2	235.2	257.4
72.5°	224.9	196.1	164.2	211.1	237.0
75°	194.9	169.0	149.2	185.8	214.7
77.5°	169.0	143.7	134.7	164.2	192.5
80°	141.9	119.1	117.9	143.1	164.2
82.5°	110.7	95.0	95.0	119.7	132.3
85°	78.2	68.6	66.8	87.2	88.4
87.5°	40.3	38.5	34.9	45.7	45.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)