

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: P293551

Luminaire Tested: **24GR-LD5-38-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293551  
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-LD5-38-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: 3573.0 lumens  
Efficiency: N/A  
Efficacy: 137.2 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

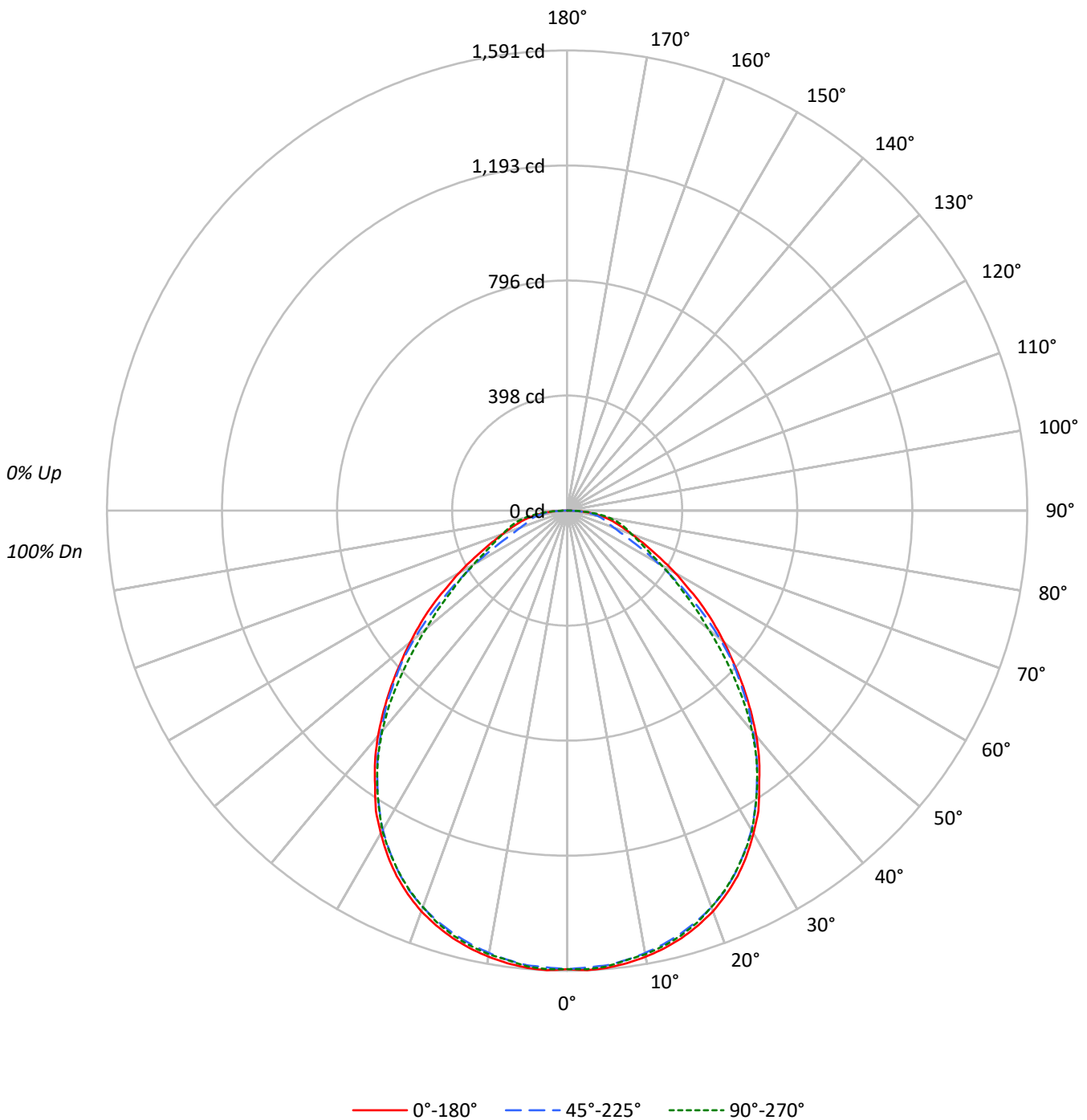
Input Watts (W): 26.049114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2133	2133	2133
5°	2143	2131	2137
10°	2140	2122	2128
15°	2131	2110	2119
20°	2111	2090	2089
25°	2070	2048	2046
30°	2002	1981	1985
35°	1901	1880	1882
40°	1788	1757	1746
45°	1639	1616	1552
50°	1481	1441	1332
55°	1330	1211	1148
60°	1165	974	1010
65°	1016	766	930
70°	929	669	929
75°	930	712	1025
80°	1010	838	1168
85°	1108	946	1252



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.1	4.2
10°-20°	428.4	12.0
20°-30°	635.3	17.8
30°-40°	716.7	20.1
40°-50°	649.1	18.2
50°-60°	468.3	13.1
60°-70°	279.6	7.8
70°-80°	172.8	4.8
80°-90°	72.8	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°	1213.8	34.0
0°-40°	1930.5	54.0
0°-60°	3047.8	85.3
0°-90°	3573.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3573.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1585	1585	1585	1585	1585	
5°	1587	1585	1578	1576	1582	151
15°	1530	1521	1515	1515	1521	431
25°	1394	1387	1379	1374	1378	641
35°	1158	1156	1144	1145	1146	724
45°	861	856	850	828	816	664
55°	567	549	516	491	490	506
65°	319	281	241	273	292	321
75°	179	155	137	171	197	191
85°	72	63	61	80	81	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1585.3	1585.3	1585.3	1585.3	1585.3
2.5°	1590.8	1586.4	1580.9	1584.2	1587.0
5°	1587.0	1584.7	1578.1	1576.5	1582.0
7.5°	1578.7	1573.2	1567.1	1569.8	1567.6
10°	1566.0	1561.0	1553.3	1553.8	1557.7
12.5°	1550.5	1544.5	1536.2	1538.4	1541.7
15°	1530.1	1520.7	1514.6	1515.2	1521.3
17.5°	1504.2	1497.0	1489.3	1490.9	1493.7
20°	1474.3	1470.5	1459.4	1456.1	1458.9
22.5°	1436.8	1429.6	1423.6	1421.9	1422.5
25°	1394.3	1386.6	1379.4	1374.4	1378.3
27.5°	1344.6	1338.0	1328.6	1327.0	1330.3
30°	1288.3	1283.4	1275.1	1272.9	1277.8
32.5°	1230.9	1222.6	1211.1	1211.1	1212.2
35°	1157.5	1155.9	1144.3	1144.8	1145.9
37.5°	1091.3	1083.5	1076.9	1070.3	1073.6
40°	1017.9	1009.0	1000.2	995.8	994.1
42.5°	938.9	932.3	928.4	912.4	908.6
45°	861.1	855.6	849.5	828.5	815.8
47.5°	781.6	780.5	775.5	738.6	725.9
50°	707.6	706.0	688.3	649.1	636.4
52.5°	637.5	626.5	603.3	564.7	562.5
55°	566.9	549.2	516.1	490.7	489.6
57.5°	492.4	471.4	437.7	423.9	431.1
60°	432.8	400.7	362.1	363.8	375.3
62.5°	370.9	335.1	297.0	313.5	327.3
65°	319.0	281.0	240.7	273.2	292.0
67.5°	273.8	238.5	199.8	243.4	261.6
70°	236.2	207.5	170.0	215.8	236.2
72.5°	206.4	179.9	150.7	193.7	217.5
75°	178.8	155.1	136.9	170.6	197.1
77.5°	155.1	131.9	123.6	150.7	176.6
80°	130.3	109.3	108.2	131.4	150.7
82.5°	101.6	87.2	87.2	109.8	121.4
85°	71.8	62.9	61.3	80.0	81.1
87.5°	37.0	35.3	32.0	42.0	42.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)