

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: P293606

Luminaire Tested: **24GR-LD5-38-A-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293606  
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-L92765-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: 3527.0 lumens  
Efficiency: N/A  
Efficacy: 136.4 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

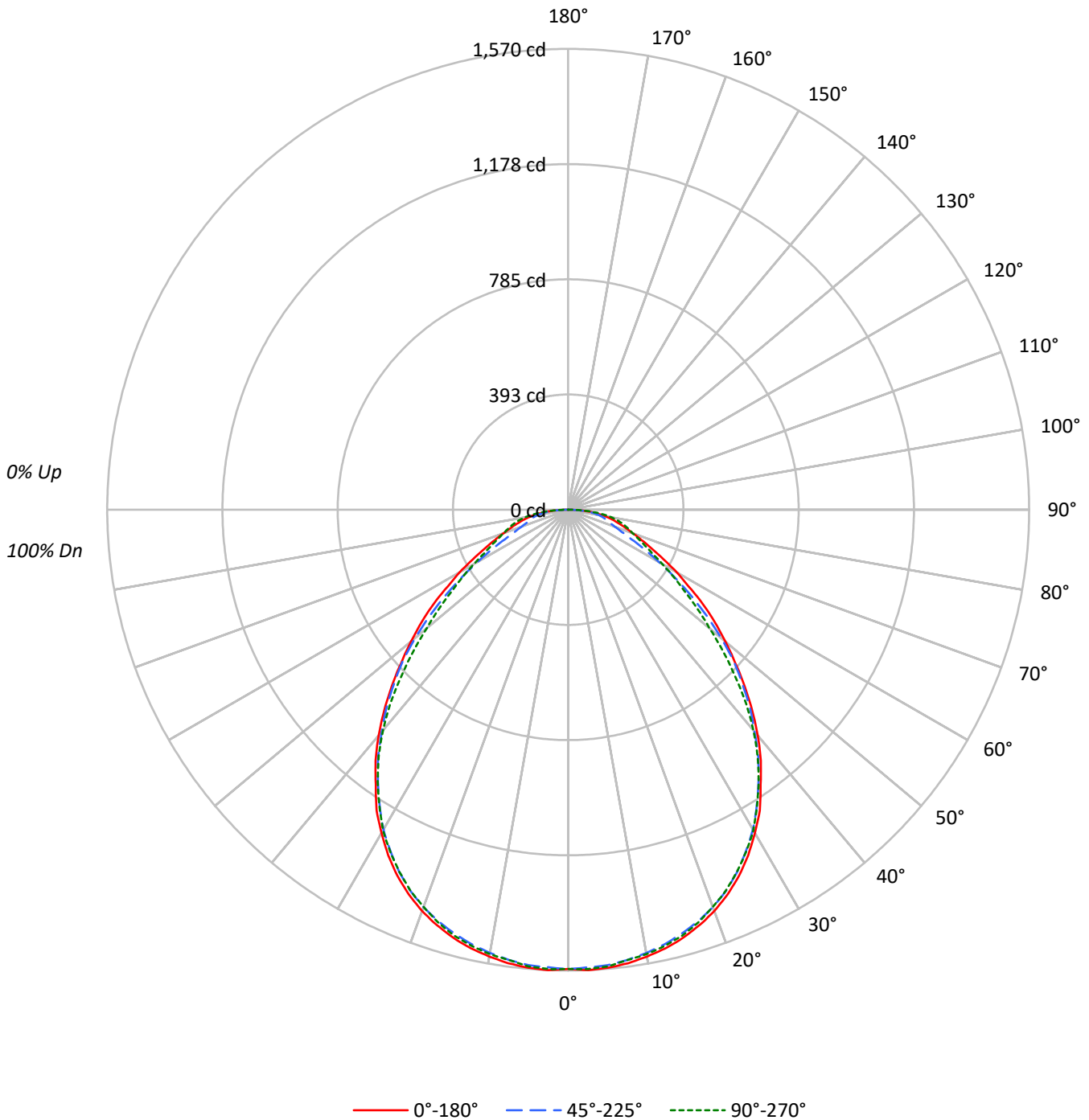
Input Watts (W): 25.854  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2106	2106	2106
5°	2116	2104	2109
10°	2112	2095	2101
15°	2104	2083	2092
20°	2084	2063	2062
25°	2043	2021	2020
30°	1976	1956	1960
35°	1877	1855	1858
40°	1765	1734	1724
45°	1617	1596	1532
50°	1462	1422	1315
55°	1313	1195	1134
60°	1150	962	997
65°	1003	756	918
70°	917	660	917
75°	918	702	1011
80°	996	828	1153
85°	1093	934	1237



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.2	4.2
10°-20°	422.9	12.0
20°-30°	627.1	17.8
30°-40°	707.4	20.1
40°-50°	640.7	18.2
50°-60°	462.2	13.1
60°-70°	276.0	7.8
70°-80°	170.6	4.8
80°-90°	71.9	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°	1198.2	34.0
0°-40°	1905.6	54.0
0°-60°	3008.6	85.3
0°-90°	3527.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3527.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1566	1564	1558	1556	1562	149
15°	1510	1501	1495	1496	1502	426
25°	1376	1369	1362	1357	1361	632
35°	1143	1141	1130	1130	1131	715
45°	850	845	839	818	805	655
55°	560	542	510	484	483	500
65°	315	277	238	270	288	317
75°	176	153	135	168	194	189
85°	71	62	60	79	80	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1564.9	1564.9	1564.9	1564.9	1564.9
2.5°	1570.3	1566.0	1560.5	1563.8	1566.5
5°	1566.5	1564.3	1557.8	1556.2	1561.6
7.5°	1558.4	1552.9	1546.9	1549.6	1547.5
10°	1545.8	1540.9	1533.3	1533.8	1537.6
12.5°	1530.6	1524.6	1516.4	1518.6	1521.8
15°	1510.4	1501.1	1495.1	1495.7	1501.7
17.5°	1484.8	1477.7	1470.1	1471.7	1474.4
20°	1455.4	1451.6	1440.7	1437.4	1440.1
22.5°	1418.3	1411.2	1405.2	1403.6	1404.2
25°	1376.4	1368.7	1361.6	1356.7	1360.6
27.5°	1327.3	1320.8	1311.5	1309.9	1313.2
30°	1271.7	1266.8	1258.7	1256.5	1261.4
32.5°	1215.1	1206.9	1195.5	1195.5	1196.6
35°	1142.6	1141.0	1129.5	1130.1	1131.2
37.5°	1077.2	1069.6	1063.1	1056.5	1059.8
40°	1004.8	996.0	987.3	983.0	981.3
42.5°	926.8	920.3	916.5	900.7	896.9
45°	850.0	844.6	838.6	817.9	805.3
47.5°	771.5	770.5	765.6	729.0	716.5
50°	698.5	696.9	679.5	640.8	628.2
52.5°	629.3	618.4	595.6	557.4	555.2
55°	559.6	542.2	509.5	484.4	483.3
57.5°	486.0	465.3	432.1	418.5	425.5
60°	427.2	395.6	357.4	359.1	370.5
62.5°	366.2	330.7	293.1	309.5	323.1
65°	314.9	277.3	237.6	269.7	288.2
67.5°	270.3	235.4	197.2	240.3	258.3
70°	233.2	204.9	167.8	213.0	233.2
72.5°	203.8	177.6	148.8	191.3	214.7
75°	176.5	153.1	135.1	168.4	194.5
77.5°	153.1	130.2	122.1	148.8	174.4
80°	128.6	107.9	106.8	129.7	148.8
82.5°	100.3	86.1	86.1	108.4	119.9
85°	70.8	62.1	60.5	79.0	80.1
87.5°	36.5	34.9	31.6	41.4	41.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)