

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: P293126

Luminaire Tested: **24GR-LD5-56-F1-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293126  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-56-F1-UNV-L92765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4592.0 lumens  
Efficiency: N/A  
Efficacy: 119.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

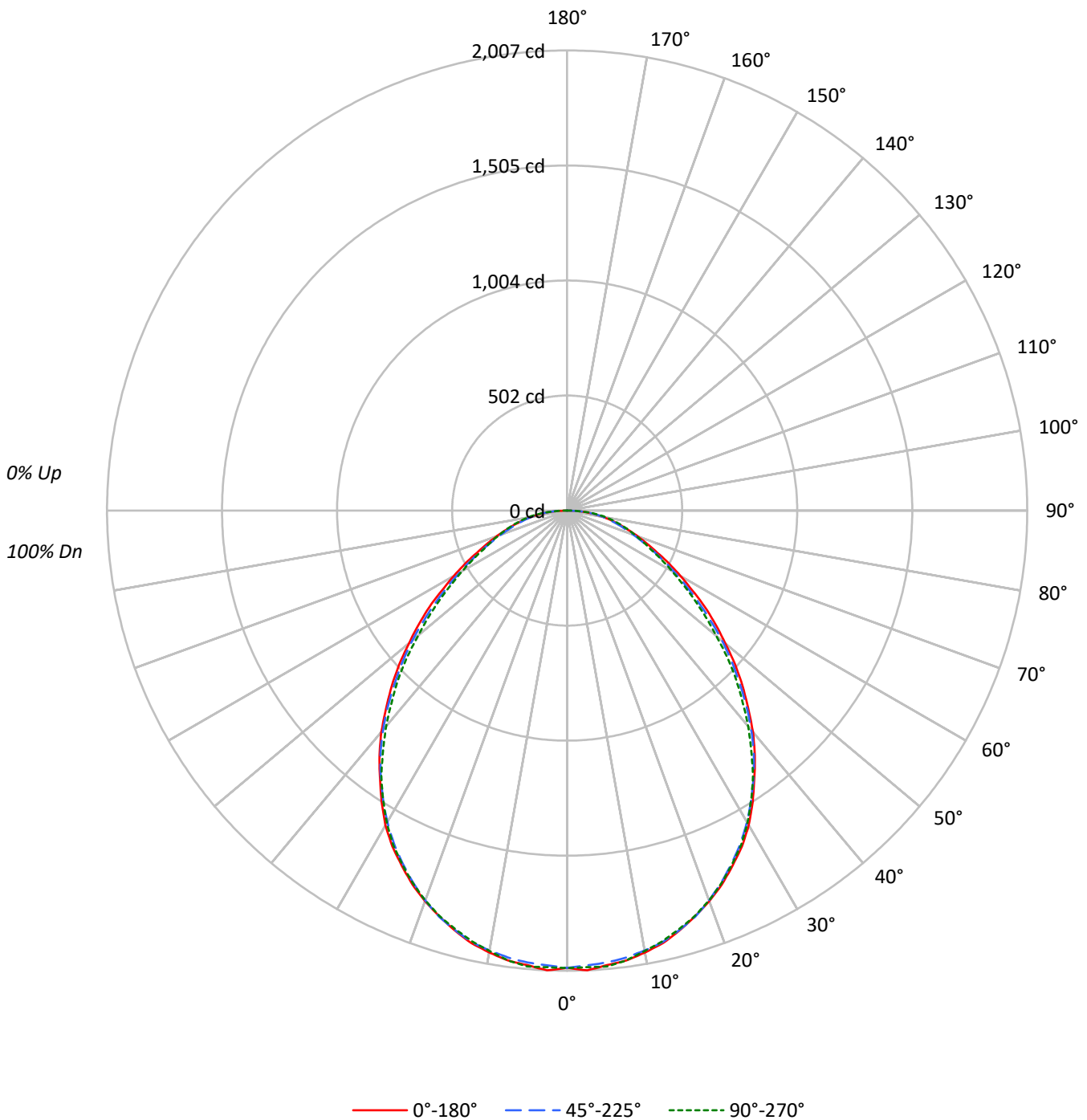
Input Watts (W): 38.595  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2684	2684	2684
5°	2688	2672	2695
10°	2673	2662	2664
15°	2640	2637	2631
20°	2596	2590	2590
25°	2535	2521	2527
30°	2462	2437	2444
35°	2338	2327	2321
40°	2214	2194	2156
45°	2058	2022	1982
50°	1885	1844	1774
55°	1722	1644	1589
60°	1534	1460	1422
65°	1381	1309	1291
70°	1282	1203	1252
75°	1226	1172	1271
80°	1226	1226	1358
85°	1272	1286	1433



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.4	4.1
10°-20°	533.1	11.6
20°-30°	782.4	17.0
30°-40°	884.5	19.3
40°-50°	817.5	17.8
50°-60°	629.8	13.7
60°-70°	417.1	9.1
70°-80°	248.3	5.4
80°-90°	91.0	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°	1503.8	32.7
0°-40°	2388.4	52.0
0°-60°	3835.7	83.5
0°-90°	4592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1995	1995	1995	1995	1995	
5°	1990	1990	1979	1980	1996	189
15°	1895	1891	1893	1892	1889	534
25°	1708	1703	1698	1696	1702	786
35°	1424	1422	1417	1410	1413	891
45°	1082	1074	1063	1044	1042	833
55°	734	719	701	682	677	655
65°	434	427	411	407	405	435
75°	236	230	225	236	244	251
85°	82	78	83	92	93	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1994.7	1994.7	1994.7	1994.7	1994.7
2.5°	2007.0	1996.6	1985.2	1985.2	1993.7
5°	1989.9	1989.9	1978.6	1979.5	1995.6
7.5°	1979.5	1973.8	1966.2	1966.2	1978.6
10°	1956.8	1952.0	1948.2	1946.4	1950.1
12.5°	1932.1	1924.6	1927.4	1924.6	1923.6
15°	1895.2	1891.4	1893.3	1892.4	1888.6
17.5°	1855.4	1853.5	1857.3	1850.7	1853.5
20°	1812.8	1807.1	1809.0	1805.2	1809.0
22.5°	1764.5	1760.7	1756.0	1751.2	1758.8
25°	1707.7	1702.9	1698.2	1696.3	1702.0
27.5°	1650.8	1643.3	1636.6	1634.7	1643.3
30°	1584.5	1576.0	1568.4	1566.6	1573.2
32.5°	1505.9	1504.0	1494.6	1490.8	1493.6
35°	1423.5	1421.6	1416.9	1410.3	1413.1
37.5°	1344.9	1344.0	1337.3	1326.0	1318.4
40°	1260.6	1254.0	1249.3	1233.2	1227.5
42.5°	1167.8	1165.9	1157.4	1139.4	1132.8
45°	1081.6	1074.0	1062.7	1043.7	1041.8
47.5°	992.6	982.2	971.8	948.1	947.1
50°	900.7	893.1	880.8	857.2	847.7
52.5°	815.5	805.1	788.0	765.3	760.5
55°	734.0	718.9	700.9	681.9	677.2
57.5°	646.9	640.3	618.5	603.3	597.6
60°	570.2	564.5	542.7	528.5	528.5
62.5°	501.0	492.5	473.6	464.1	464.1
65°	433.8	427.2	411.1	407.3	405.4
67.5°	376.0	367.5	356.1	355.2	359.9
70°	325.8	315.4	305.9	315.4	318.2
72.5°	278.5	271.8	263.3	275.6	281.3
75°	235.8	230.2	225.4	235.8	244.4
77.5°	197.0	191.3	191.3	202.7	210.3
80°	158.2	154.4	158.2	167.6	175.2
82.5°	121.2	118.4	123.1	132.6	137.3
85°	82.4	77.7	83.3	91.9	92.8
87.5°	38.8	37.9	41.7	47.4	46.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)