

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: P293062

Luminaire Tested: **24GR-LD5-56-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293062  
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-L93050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5173.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 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

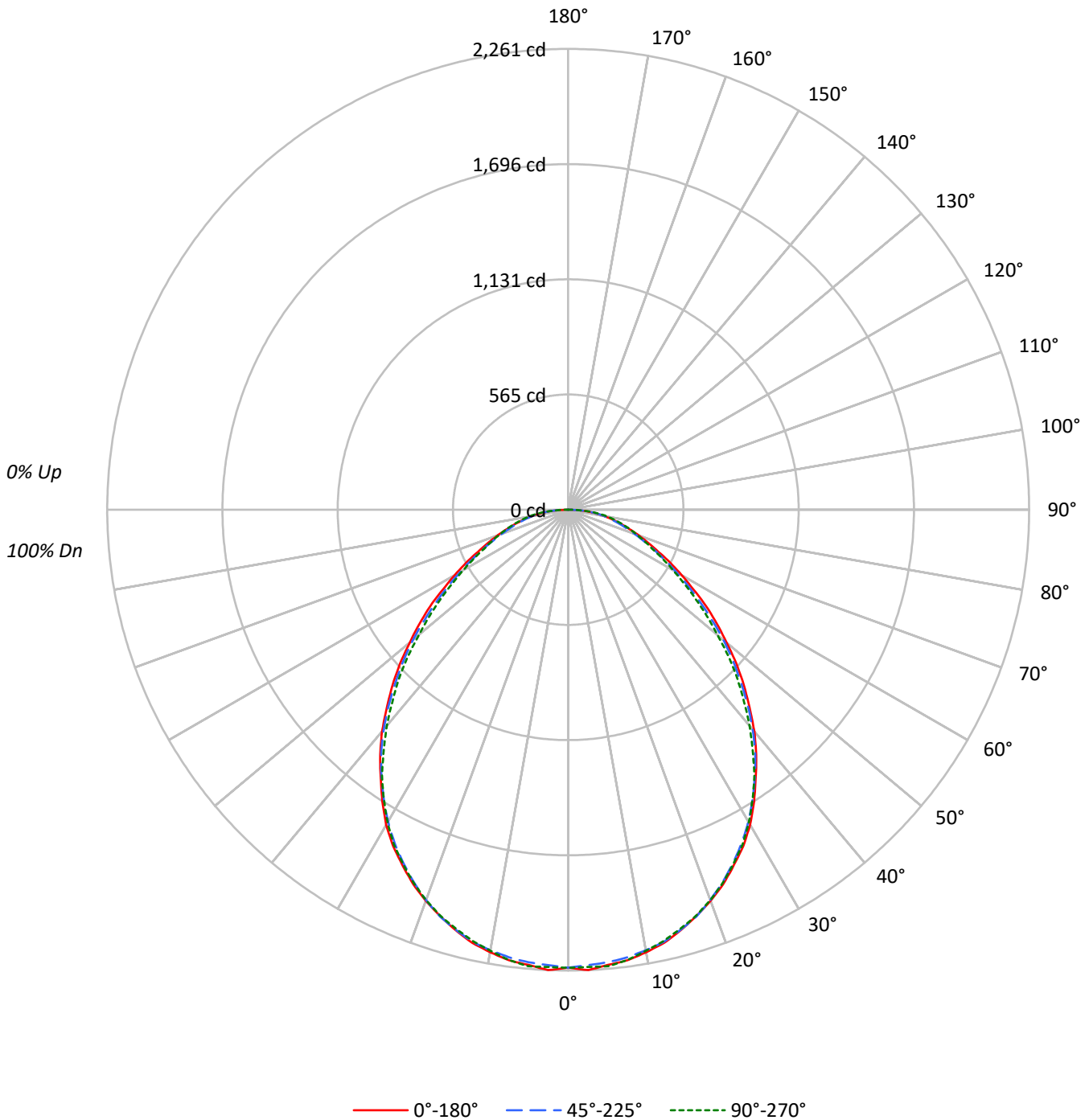
Input Watts (W): 39.980142  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3023	3023	3023
5°	3028	3010	3036
10°	3012	2998	3002
15°	2974	2971	2964
20°	2924	2918	2918
25°	2856	2840	2846
30°	2773	2745	2753
35°	2634	2622	2615
40°	2494	2472	2429
45°	2319	2278	2233
50°	2124	2077	1999
55°	1940	1852	1790
60°	1728	1645	1602
65°	1556	1474	1454
70°	1444	1356	1410
75°	1381	1320	1431
80°	1381	1381	1530
85°	1433	1450	1615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.2	4.1
10°-20°	600.5	11.6
20°-30°	881.4	17.0
30°-40°	996.4	19.3
40°-50°	920.9	17.8
50°-60°	709.5	13.7
60°-70°	469.8	9.1
70°-80°	279.7	5.4
80°-90°	102.5	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°	1694.1	32.7
0°-40°	2690.6	52.0
0°-60°	4321.0	83.5
0°-90°	5173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5173.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2247	2247	2247	2247	2247	
5°	2242	2242	2229	2230	2248	213
15°	2135	2131	2133	2132	2128	602
25°	1924	1918	1913	1911	1917	886
35°	1604	1602	1596	1589	1592	1003
45°	1218	1210	1197	1176	1174	939
55°	827	810	790	768	763	738
65°	489	481	463	459	457	490
75°	266	259	254	266	275	283
85°	93	88	94	104	105	99
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2247.0	2247.0	2247.0	2247.0	2247.0
2.5°	2260.9	2249.2	2236.4	2236.4	2246.0
5°	2241.7	2241.7	2228.9	2230.0	2248.1
7.5°	2230.0	2223.6	2215.0	2215.0	2228.9
10°	2204.3	2199.0	2194.7	2192.6	2196.9
12.5°	2176.6	2168.1	2171.3	2168.1	2167.0
15°	2135.0	2130.7	2132.9	2131.8	2127.5
17.5°	2090.2	2088.1	2092.3	2084.8	2088.1
20°	2042.2	2035.8	2037.9	2033.6	2037.9
22.5°	1987.8	1983.5	1978.2	1972.8	1981.4
25°	1923.7	1918.4	1913.1	1910.9	1917.3
27.5°	1859.7	1851.2	1843.7	1841.6	1851.2
30°	1785.0	1775.4	1766.9	1764.8	1772.2
32.5°	1696.5	1694.3	1683.7	1679.4	1682.6
35°	1603.6	1601.5	1596.2	1588.7	1591.9
37.5°	1515.1	1514.0	1506.6	1493.8	1485.2
40°	1420.1	1412.7	1407.3	1389.2	1382.8
42.5°	1315.6	1313.4	1303.8	1283.6	1276.1
45°	1218.5	1209.9	1197.1	1175.8	1173.7
47.5°	1118.2	1106.4	1094.7	1068.0	1067.0
50°	1014.7	1006.1	992.3	965.6	954.9
52.5°	918.7	906.9	887.7	862.1	856.8
55°	826.9	809.8	789.6	768.2	762.9
57.5°	728.7	721.3	696.7	679.7	673.3
60°	642.3	635.9	611.4	595.4	595.4
62.5°	564.4	554.8	533.5	522.8	522.8
65°	488.7	481.2	463.1	458.8	456.7
67.5°	423.6	414.0	401.2	400.1	405.4
70°	367.0	355.3	344.6	355.3	358.5
72.5°	313.7	306.2	296.6	310.5	316.9
75°	265.7	259.3	253.9	265.7	275.3
77.5°	221.9	215.5	215.5	228.3	236.9
80°	178.2	173.9	178.2	188.9	197.4
82.5°	136.6	133.4	138.7	149.4	154.7
85°	92.8	87.5	93.9	103.5	104.6
87.5°	43.7	42.7	46.9	53.3	52.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)