

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: P293503

Luminaire Tested: **24GR-LD5-56-A-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293503  
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-LD5-56-A-UNV-L82765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5231.0 lumens  
Efficiency: N/A  
Efficacy: 134.2 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

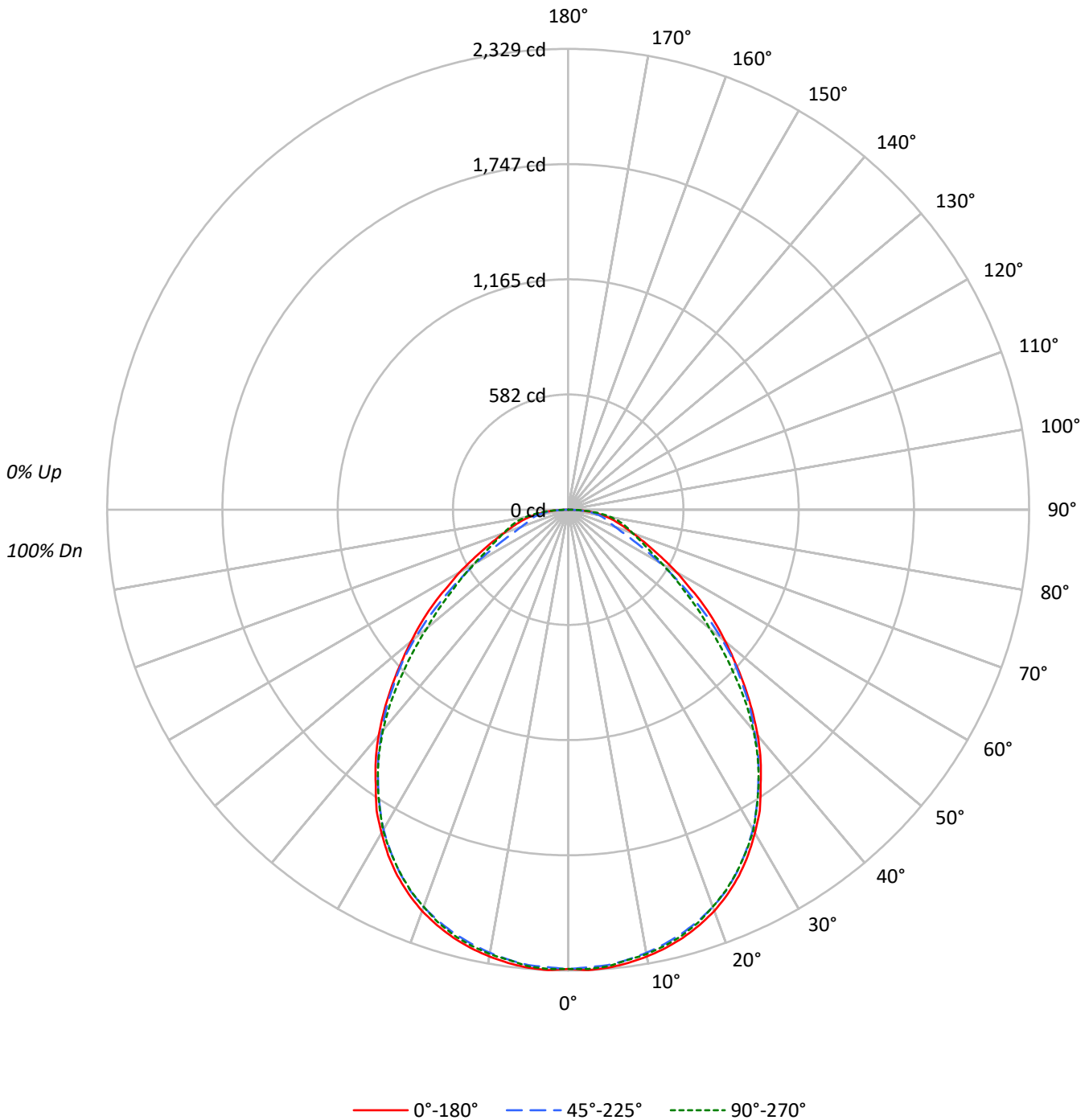
Input Watts (W): 38.967  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3123	3123	3123
5°	3138	3120	3128
10°	3132	3107	3116
15°	3120	3089	3102
20°	3091	3059	3058
25°	3030	2998	2996
30°	2930	2900	2907
35°	2783	2752	2756
40°	2617	2572	2556
45°	2399	2367	2273
50°	2169	2109	1950
55°	1947	1772	1681
60°	1705	1426	1479
65°	1487	1122	1361
70°	1361	979	1361
75°	1361	1042	1500
80°	1478	1227	1709
85°	1623	1385	1834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.8	4.2
10°-20°	627.2	12.0
20°-30°	930.0	17.8
30°-40°	1049.2	20.1
40°-50°	950.3	18.2
50°-60°	685.6	13.1
60°-70°	409.3	7.8
70°-80°	253.0	4.8
80°-90°	106.6	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°	1777.1	34.0
0°-40°	2826.3	54.0
0°-60°	4462.1	85.3
0°-90°	5231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5231.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2321	2321	2321	2321	2321	
5°	2323	2320	2310	2308	2316	221
15°	2240	2226	2218	2218	2227	631
25°	2041	2030	2020	2012	2018	938
35°	1695	1692	1675	1676	1678	1060
45°	1261	1253	1244	1213	1194	971
55°	830	804	756	718	717	741
65°	467	411	352	400	428	470
75°	262	227	200	250	288	280
85°	105	92	90	117	119	110
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2320.9	2320.9	2320.9	2320.9	2320.9
2.5°	2329.0	2322.6	2314.5	2319.3	2323.4
5°	2323.4	2320.1	2310.4	2308.0	2316.1
7.5°	2311.2	2303.2	2294.3	2298.3	2295.1
10°	2292.6	2285.4	2274.1	2274.9	2280.5
12.5°	2270.0	2261.1	2249.0	2252.2	2257.1
15°	2240.1	2226.4	2217.5	2218.3	2227.2
17.5°	2202.1	2191.6	2180.3	2182.7	2186.8
20°	2158.5	2152.8	2136.7	2131.8	2135.9
22.5°	2103.5	2093.0	2084.2	2081.7	2082.5
25°	2041.3	2030.0	2019.5	2012.2	2017.9
27.5°	1968.6	1958.9	1945.2	1942.7	1947.6
30°	1886.2	1878.9	1866.8	1863.5	1870.8
32.5°	1802.1	1790.0	1773.0	1773.0	1774.6
35°	1694.6	1692.2	1675.2	1676.1	1677.7
37.5°	1597.7	1586.3	1576.7	1567.0	1571.8
40°	1490.2	1477.3	1464.3	1457.9	1455.4
42.5°	1374.6	1364.9	1359.3	1335.8	1330.2
45°	1260.7	1252.6	1243.7	1213.0	1194.4
47.5°	1144.3	1142.7	1135.4	1081.3	1062.7
50°	1036.0	1033.6	1007.7	950.4	931.8
52.5°	933.4	917.2	883.3	826.7	823.5
55°	829.9	804.1	755.6	718.4	716.8
57.5°	720.8	690.1	640.8	620.6	631.1
60°	633.6	586.7	530.1	532.6	549.5
62.5°	543.1	490.5	434.8	459.0	479.2
65°	467.1	411.3	352.3	400.0	427.5
67.5°	400.8	349.1	292.5	356.4	383.1
70°	345.9	303.9	248.9	316.0	345.9
72.5°	302.2	263.4	220.6	283.7	318.4
75°	261.8	227.1	200.4	249.7	288.5
77.5°	227.1	193.1	181.0	220.6	258.6
80°	190.7	160.0	158.4	192.3	220.6
82.5°	148.7	127.7	127.7	160.8	177.8
85°	105.1	92.1	89.7	117.2	118.8
87.5°	54.1	51.7	46.9	61.4	61.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)