

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: P293509

Luminaire Tested: **24GR-LD5-56-A-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293509  
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-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5928.0 lumens  
Efficiency: N/A  
Efficacy: 147.9 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

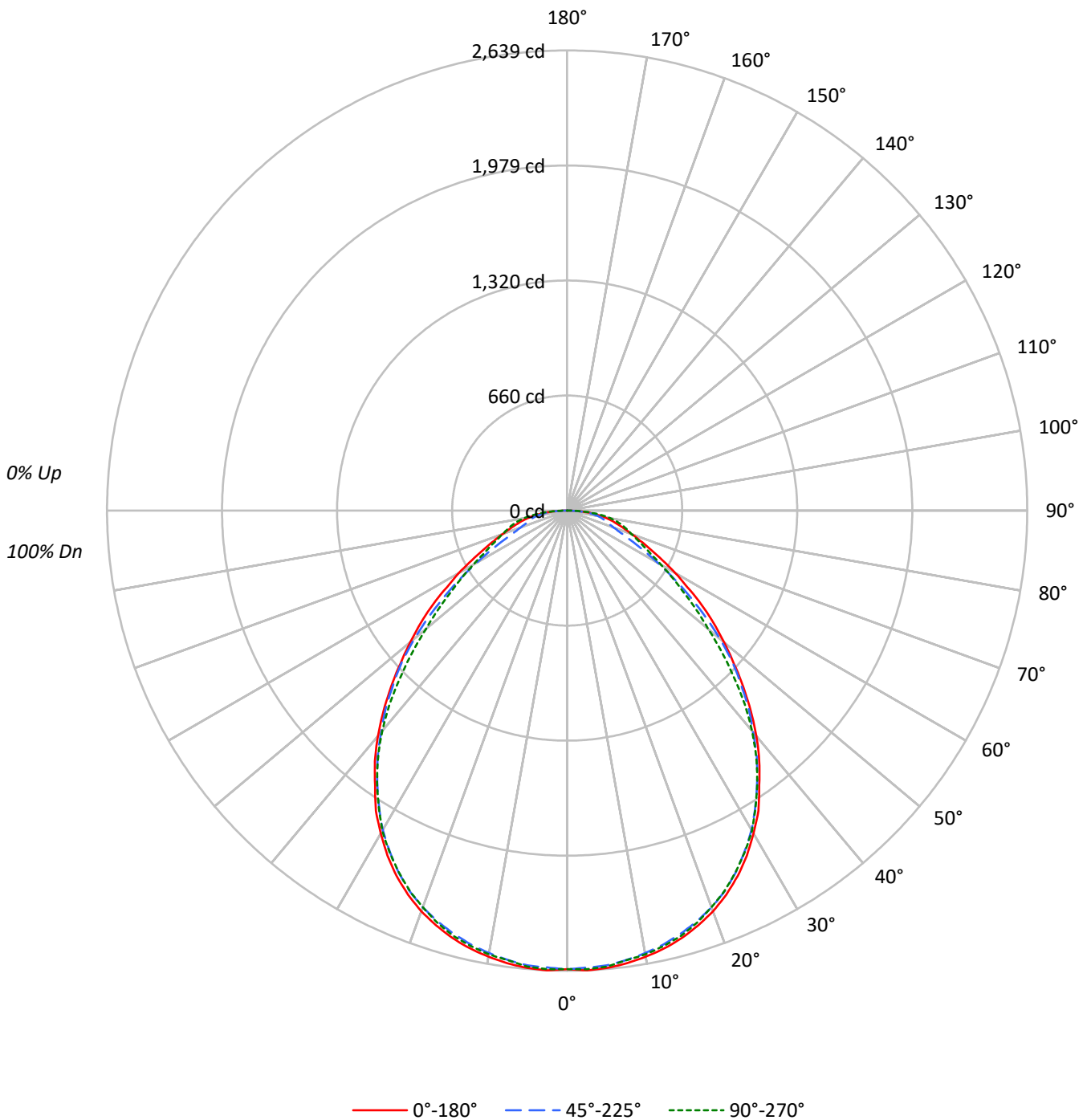
Input Watts (W): 40.083  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3539	3539	3539
5°	3556	3536	3545
10°	3550	3521	3531
15°	3536	3500	3516
20°	3502	3467	3466
25°	3434	3398	3395
30°	3321	3287	3294
35°	3154	3118	3123
40°	2966	2915	2897
45°	2719	2682	2576
50°	2458	2390	2210
55°	2206	2009	1905
60°	1932	1617	1676
65°	1685	1271	1543
70°	1542	1110	1542
75°	1542	1181	1699
80°	1674	1391	1937
85°	1839	1570	2078



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.1	4.2
10°-20°	710.8	12.0
20°-30°	1054.0	17.8
30°-40°	1189.0	20.1
40°-50°	1076.9	18.2
50°-60°	776.9	13.1
60°-70°	463.9	7.8
70°-80°	286.7	4.8
80°-90°	120.8	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°	2013.8	34.0
0°-40°	3202.8	54.0
0°-60°	5056.6	85.3
0°-90°	5928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5928.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2630	2630	2630	2630	2630	
5°	2633	2629	2618	2616	2625	250
15°	2539	2523	2513	2514	2524	716
25°	2313	2300	2289	2280	2287	1063
35°	1920	1918	1898	1899	1901	1202
45°	1429	1420	1409	1375	1354	1101
55°	940	911	856	814	812	840
65°	529	466	399	453	484	532
75°	297	257	227	283	327	317
85°	119	104	102	133	135	124
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2630.2	2630.2	2630.2	2630.2	2630.2
2.5°	2639.3	2632.0	2622.9	2628.4	2632.9
5°	2632.9	2629.3	2618.3	2615.5	2624.7
7.5°	2619.2	2610.0	2600.0	2604.5	2600.9
10°	2598.1	2589.9	2577.1	2578.0	2584.4
12.5°	2572.5	2562.4	2548.7	2552.3	2557.8
15°	2538.6	2523.0	2513.0	2513.9	2524.0
17.5°	2495.6	2483.7	2470.8	2473.6	2478.2
20°	2446.1	2439.7	2421.4	2415.9	2420.5
22.5°	2383.8	2371.9	2361.9	2359.1	2360.0
25°	2313.3	2300.5	2288.6	2280.3	2286.8
27.5°	2230.9	2219.9	2204.3	2201.6	2207.1
30°	2137.5	2129.2	2115.5	2111.8	2120.1
32.5°	2042.2	2028.5	2009.3	2009.3	2011.1
35°	1920.4	1917.7	1898.5	1899.4	1901.2
37.5°	1810.5	1797.7	1786.7	1775.7	1781.2
40°	1688.7	1674.1	1659.4	1652.1	1649.4
42.5°	1557.8	1546.8	1540.4	1513.8	1507.4
45°	1428.7	1419.5	1409.4	1374.6	1353.6
47.5°	1296.8	1294.9	1286.7	1225.3	1204.3
50°	1174.1	1171.3	1142.0	1077.0	1055.9
52.5°	1057.8	1039.4	1001.0	936.9	933.2
55°	940.5	911.2	856.3	814.1	812.3
57.5°	816.9	782.1	726.2	703.3	715.2
60°	718.0	664.9	600.8	603.5	622.7
62.5°	615.4	555.9	492.7	520.2	543.1
65°	529.3	466.1	399.3	453.3	484.5
67.5°	454.2	395.6	331.5	403.9	434.1
70°	392.0	344.3	282.1	358.1	392.0
72.5°	342.5	298.6	250.0	321.4	360.8
75°	296.7	257.3	227.1	283.0	326.9
77.5°	257.3	218.9	205.1	250.0	293.1
80°	216.1	181.3	179.5	218.0	250.0
82.5°	168.5	144.7	144.7	182.2	201.5
85°	119.1	104.4	101.7	132.8	134.6
87.5°	61.4	58.6	53.1	69.6	69.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)