

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: P293507

Luminaire Tested: **24GR-LD5-56-A-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293507  
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-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5791.0 lumens  
Efficiency: N/A  
Efficacy: 145.8 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

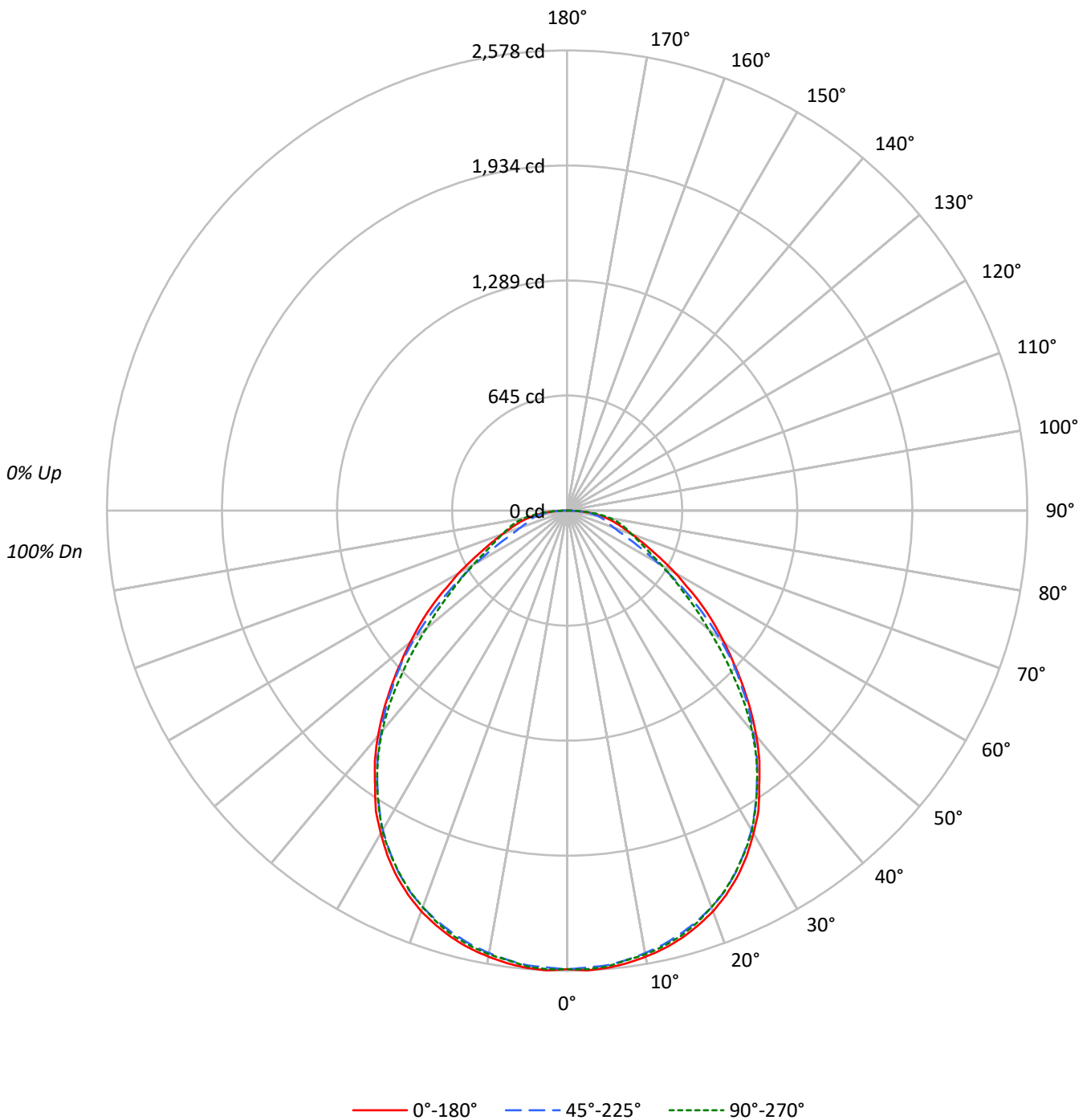
Input Watts (W): 39.711  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3457	3457	3457
5°	3474	3455	3463
10°	3468	3440	3449
15°	3454	3420	3434
20°	3422	3387	3386
25°	3355	3319	3316
30°	3244	3211	3218
35°	3082	3046	3051
40°	2898	2847	2830
45°	2656	2620	2516
50°	2401	2335	2159
55°	2155	1962	1861
60°	1887	1579	1637
65°	1646	1242	1507
70°	1506	1084	1506
75°	1507	1154	1660
80°	1636	1358	1892
85°	1795	1533	2030



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.3	4.2
10°-20°	694.4	12.0
20°-30°	1029.6	17.8
30°-40°	1161.5	20.1
40°-50°	1052.0	18.2
50°-60°	758.9	13.1
60°-70°	453.2	7.8
70°-80°	280.1	4.8
80°-90°	118.0	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°	1967.3	34.0
0°-40°	3128.8	54.0
0°-60°	4939.8	85.3
0°-90°	5791.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5791.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2569	2569	2569	2569	2569	
5°	2572	2568	2558	2555	2564	244
15°	2480	2465	2455	2456	2466	699
25°	2260	2247	2236	2228	2234	1038
35°	1876	1873	1855	1856	1857	1174
45°	1396	1387	1377	1343	1322	1075
55°	919	890	836	795	794	820
65°	517	455	390	443	473	520
75°	290	251	222	276	319	310
85°	116	102	99	130	132	121
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2569.4	2569.4	2569.4	2569.4	2569.4
2.5°	2578.3	2571.2	2562.2	2567.6	2572.1
5°	2572.1	2568.5	2557.8	2555.1	2564.0
7.5°	2558.7	2549.7	2539.9	2544.3	2540.8
10°	2538.1	2530.0	2517.5	2518.4	2524.7
12.5°	2513.0	2503.2	2489.8	2493.4	2498.7
15°	2479.9	2464.7	2454.9	2455.8	2465.6
17.5°	2437.9	2426.3	2413.7	2416.4	2420.9
20°	2389.6	2383.3	2365.4	2360.1	2364.5
22.5°	2328.7	2317.1	2307.3	2304.6	2305.5
25°	2259.9	2247.3	2235.7	2227.6	2233.9
27.5°	2179.3	2168.6	2153.4	2150.7	2156.1
30°	2088.1	2080.0	2066.6	2063.0	2071.1
32.5°	1995.0	1981.6	1962.8	1962.8	1964.6
35°	1876.1	1873.4	1854.6	1855.5	1857.3
37.5°	1768.7	1756.2	1745.4	1734.7	1740.1
40°	1649.7	1635.4	1621.1	1613.9	1611.2
42.5°	1521.8	1511.0	1504.8	1478.8	1472.6
45°	1395.6	1386.7	1376.8	1342.9	1322.3
47.5°	1266.8	1265.0	1257.0	1197.0	1176.4
50°	1146.9	1144.2	1115.6	1052.1	1031.5
52.5°	1033.3	1015.4	977.8	915.2	911.6
55°	918.8	890.2	836.5	795.3	793.5
57.5°	798.0	764.0	709.4	687.1	698.7
60°	701.4	649.5	586.9	589.6	608.4
62.5°	601.2	543.0	481.3	508.2	530.5
65°	517.1	455.4	390.1	442.8	473.3
67.5°	443.7	386.5	323.9	394.5	424.1
70°	382.9	336.4	275.5	349.8	382.9
72.5°	334.6	291.7	244.2	314.0	352.5
75°	289.9	251.4	221.9	276.4	319.4
77.5°	251.4	213.8	200.4	244.2	286.3
80°	211.1	177.1	175.3	212.9	244.2
82.5°	164.6	141.4	141.4	178.0	196.8
85°	116.3	102.0	99.3	129.7	131.5
87.5°	59.9	57.3	51.9	68.0	68.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)