

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: P293003

Luminaire Tested: **24GR-LD5-56-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293003
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-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5724.0 lumens
Efficiency: N/A
Efficacy: 144.1 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

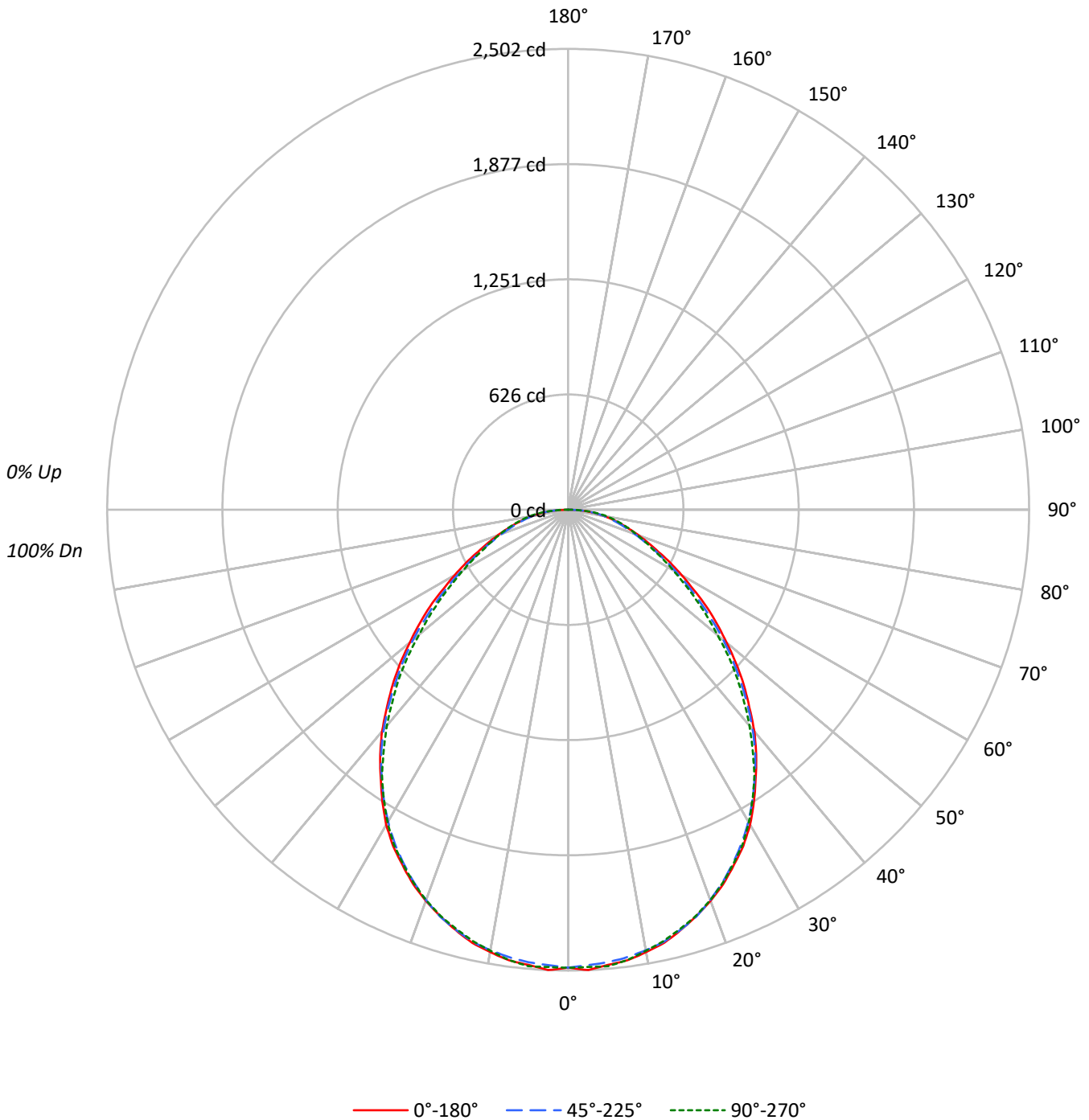
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293003

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P293003

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-4500K

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°	3345	3345	3345
5°	3350	3331	3360
10°	3332	3318	3321
15°	3291	3287	3279
20°	3236	3229	3229
25°	3160	3143	3150
30°	3069	3038	3047
35°	2915	2901	2893
40°	2760	2735	2687
45°	2566	2520	2471
50°	2350	2298	2212
55°	2146	2050	1980
60°	1912	1820	1773
65°	1721	1631	1609
70°	1598	1500	1561
75°	1528	1461	1583
80°	1528	1528	1692
85°	1585	1604	1786



TEST NUMBER: P293003

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.8	4.1
10°-20°	664.5	11.6
20°-30°	975.2	17.0
30°-40°	1102.6	19.3
40°-50°	1019.0	17.8
50°-60°	785.1	13.7
60°-70°	519.9	9.1
70°-80°	309.5	5.4
80°-90°	113.4	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°	1874.6	32.7
0°-40°	2977.1	52.0
0°-60°	4781.3	83.5
0°-90°	5724.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5724.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2486	2486	2486	2486	2486	
5°	2480	2480	2466	2468	2488	236
15°	2362	2358	2360	2359	2354	666
25°	2129	2123	2117	2114	2122	980
35°	1774	1772	1766	1758	1762	1110
45°	1348	1339	1325	1301	1299	1039
55°	915	896	874	850	844	816
65°	541	532	512	508	505	542
75°	294	287	281	294	305	313
85°	103	97	104	114	116	109
90°	0	0	0	0	0	



TEST NUMBER: P293003

CATALOG NUMBER: 24GR-LD5-56-F1-UNV-L82765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2486.4	2486.4	2486.4	2486.4	2486.4
2.5°	2501.7	2488.7	2474.6	2474.6	2485.2
5°	2480.5	2480.5	2466.3	2467.5	2487.6
7.5°	2467.5	2460.4	2451.0	2451.0	2466.3
10°	2439.1	2433.2	2428.5	2426.2	2430.9
12.5°	2408.4	2399.0	2402.5	2399.0	2397.8
15°	2362.4	2357.7	2360.0	2358.9	2354.1
17.5°	2312.8	2310.5	2315.2	2306.9	2310.5
20°	2259.7	2252.6	2255.0	2250.2	2255.0
22.5°	2199.5	2194.8	2188.9	2183.0	2192.4
25°	2128.6	2122.7	2116.8	2114.5	2121.6
27.5°	2057.8	2048.4	2040.1	2037.7	2048.4
30°	1975.2	1964.5	1955.1	1952.7	1961.0
32.5°	1877.2	1874.8	1863.0	1858.3	1861.8
35°	1774.5	1772.1	1766.2	1757.9	1761.5
37.5°	1676.5	1675.3	1667.0	1652.9	1643.4
40°	1571.4	1563.1	1557.2	1537.2	1530.1
42.5°	1455.7	1453.3	1442.7	1420.3	1412.0
45°	1348.3	1338.8	1324.6	1301.0	1298.7
47.5°	1237.3	1224.3	1211.3	1181.8	1180.6
50°	1122.8	1113.3	1098.0	1068.5	1056.6
52.5°	1016.5	1003.5	982.3	953.9	948.0
55°	915.0	896.1	873.7	850.0	844.1
57.5°	806.4	798.1	770.9	752.1	745.0
60°	710.7	703.6	676.5	658.8	658.8
62.5°	624.5	613.9	590.3	578.5	578.5
65°	540.7	532.5	512.4	507.7	505.3
67.5°	468.7	458.1	443.9	442.7	448.6
70°	406.1	393.1	381.3	393.1	396.7
72.5°	347.1	338.8	328.2	343.6	350.6
75°	294.0	286.9	281.0	294.0	304.6
77.5°	245.6	238.5	238.5	252.7	262.1
80°	197.2	192.4	197.2	209.0	218.4
82.5°	151.1	147.6	153.5	165.3	171.2
85°	102.7	96.8	103.9	114.5	115.7
87.5°	48.4	47.2	51.9	59.0	57.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)