

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: P292936

Luminaire Tested: **24GR-LD5-56-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292936
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-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5917.0 lumens
Efficiency: N/A
Efficacy: 148.3 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

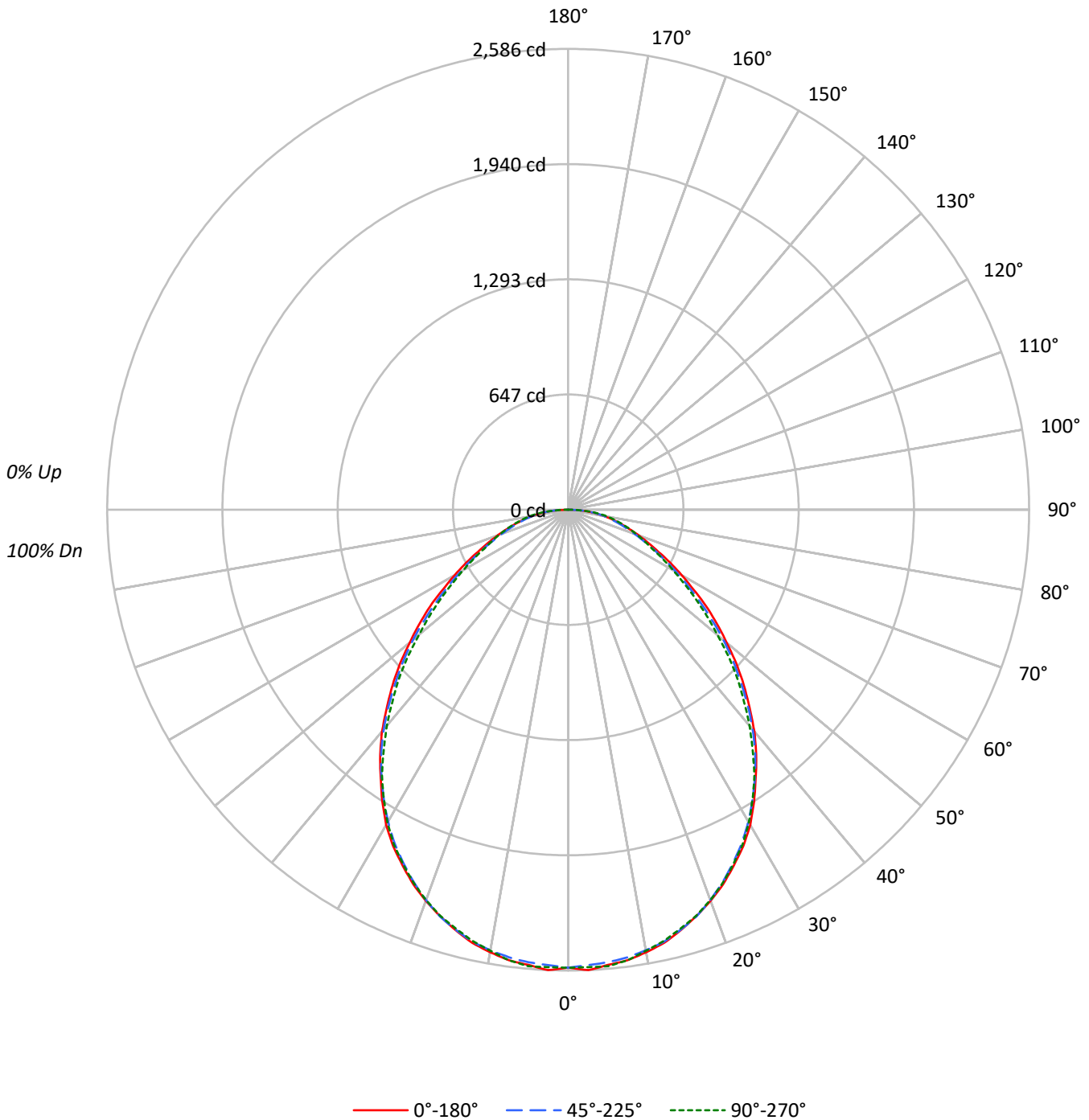
Input Watts (W): 39.897
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3458	3458	3458
5°	3463	3443	3473
10°	3445	3430	3433
15°	3402	3398	3390
20°	3345	3338	3338
25°	3267	3249	3256
30°	3172	3140	3149
35°	3013	2999	2991
40°	2853	2827	2778
45°	2652	2606	2555
50°	2429	2376	2286
55°	2219	2118	2047
60°	1977	1882	1833
65°	1780	1686	1663
70°	1651	1551	1613
75°	1580	1510	1637
80°	1579	1579	1750
85°	1639	1658	1846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.7	4.1
10°-20°	686.9	11.6
20°-30°	1008.1	17.0
30°-40°	1139.8	19.3
40°-50°	1053.4	17.8
50°-60°	811.6	13.7
60°-70°	537.4	9.1
70°-80°	319.9	5.4
80°-90°	117.2	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°	1937.8	32.7
0°-40°	3077.5	52.0
0°-60°	4942.5	83.5
0°-90°	5917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5917.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2570	2570	2570	2570	2570	
5°	2564	2564	2550	2551	2571	244
15°	2442	2437	2440	2438	2434	688
25°	2200	2194	2188	2186	2193	1013
35°	1834	1832	1826	1817	1821	1148
45°	1394	1384	1369	1345	1342	1074
55°	946	926	903	879	873	844
65°	559	550	530	525	522	560
75°	304	297	290	304	315	324
85°	106	100	107	118	120	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2570.2	2570.2	2570.2	2570.2	2570.2
2.5°	2586.1	2572.6	2558.0	2558.0	2569.0
5°	2564.1	2564.1	2549.5	2550.7	2571.4
7.5°	2550.7	2543.4	2533.6	2533.6	2549.5
10°	2521.4	2515.3	2510.4	2508.0	2512.8
12.5°	2489.7	2479.9	2483.6	2479.9	2478.7
15°	2442.1	2437.2	2439.6	2438.4	2433.5
17.5°	2390.8	2388.4	2393.2	2384.7	2388.4
20°	2335.9	2328.6	2331.0	2326.1	2331.0
22.5°	2273.6	2268.8	2262.7	2256.6	2266.3
25°	2200.4	2194.3	2188.2	2185.8	2193.1
27.5°	2127.2	2117.4	2108.9	2106.4	2117.4
30°	2041.8	2030.8	2021.0	2018.6	2027.1
32.5°	1940.5	1938.0	1925.8	1920.9	1924.6
35°	1834.3	1831.9	1825.7	1817.2	1820.9
37.5°	1733.0	1731.8	1723.2	1708.6	1698.8
40°	1624.4	1615.8	1609.7	1589.0	1581.7
42.5°	1504.8	1502.3	1491.4	1468.2	1459.6
45°	1393.7	1384.0	1369.3	1344.9	1342.5
47.5°	1279.0	1265.6	1252.2	1221.6	1220.4
50°	1160.6	1150.9	1135.0	1104.5	1092.3
52.5°	1050.8	1037.4	1015.4	986.1	980.0
55°	945.8	926.3	903.1	878.7	872.6
57.5°	833.5	825.0	796.9	777.4	770.1
60°	734.7	727.4	699.3	681.0	681.0
62.5°	645.6	634.6	610.2	598.0	598.0
65°	559.0	550.4	529.7	524.8	522.3
67.5°	484.5	473.5	458.9	457.7	463.8
70°	419.8	406.4	394.2	406.4	410.1
72.5°	358.8	350.3	339.3	355.1	362.5
75°	303.9	296.6	290.5	303.9	314.9
77.5°	253.8	246.5	246.5	261.2	270.9
80°	203.8	198.9	203.8	216.0	225.8
82.5°	156.2	152.6	158.7	170.9	177.0
85°	106.2	100.1	107.4	118.4	119.6
87.5°	50.0	48.8	53.7	61.0	59.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)