

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: P293075

Luminaire Tested: **24GR-LD5-85-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293075
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-LD5-85-F1-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6449.0 lumens
Efficiency: N/A
Efficacy: 101.0 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

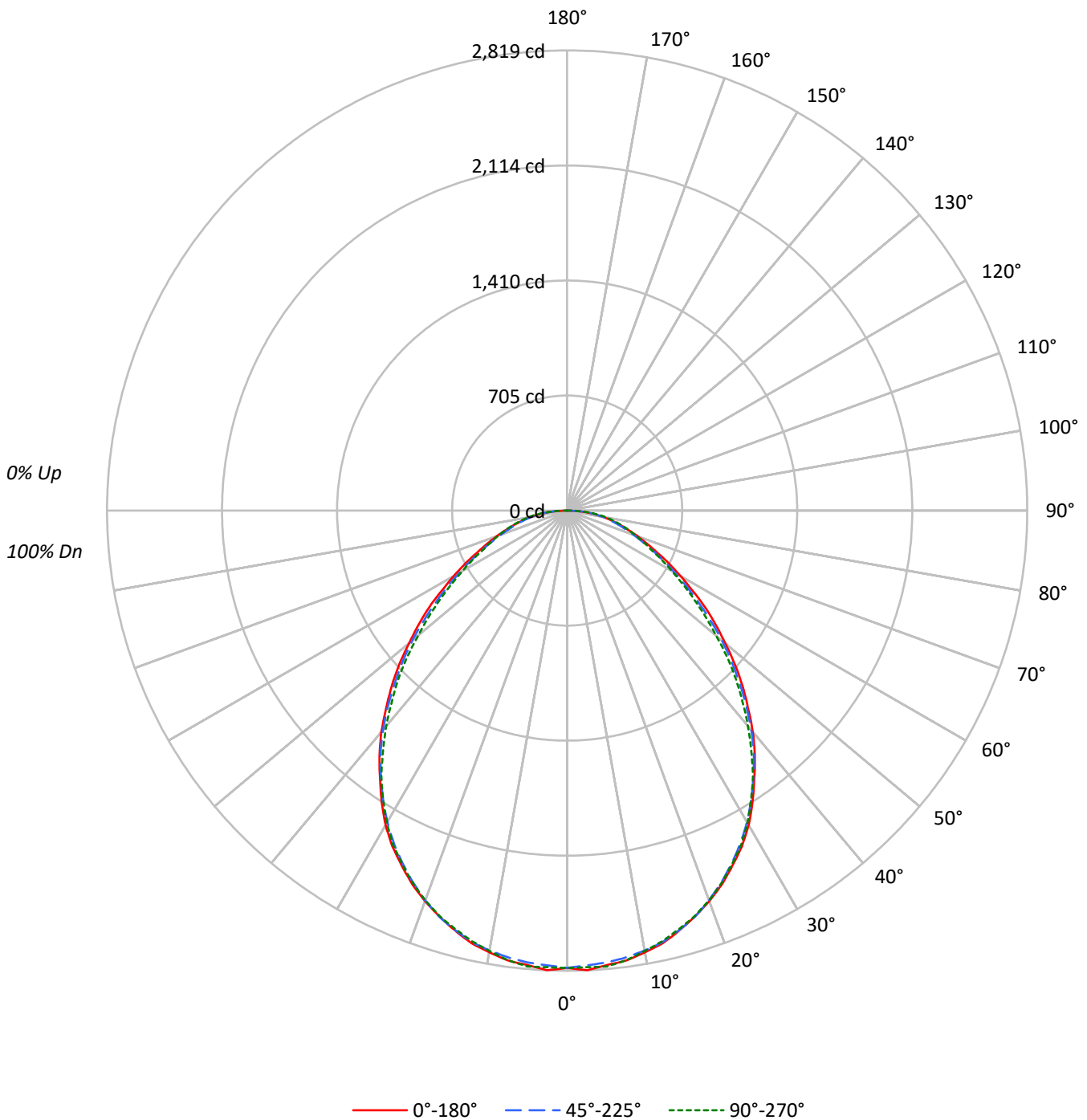
Input Watts (W): 63.838269
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3769	3769	3769
5°	3774	3753	3785
10°	3755	3738	3742
15°	3707	3704	3695
20°	3645	3638	3638
25°	3560	3541	3549
30°	3457	3422	3433
35°	3284	3268	3260
40°	3110	3082	3028
45°	2890	2840	2784
50°	2648	2589	2492
55°	2418	2309	2231
60°	2155	2051	1997
65°	1940	1838	1812
70°	1800	1690	1758
75°	1722	1646	1784
80°	1721	1721	1907
85°	1786	1808	2013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.6	4.1
10°-20°	748.7	11.6
20°-30°	1098.8	17.0
30°-40°	1242.2	19.3
40°-50°	1148.1	17.8
50°-60°	884.6	13.7
60°-70°	585.7	9.1
70°-80°	348.7	5.4
80°-90°	127.7	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°	2112.0	32.7
0°-40°	3354.2	52.0
0°-60°	5386.9	83.5
0°-90°	6449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6449.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2801	2801	2801	2801	2801	
5°	2795	2795	2779	2780	2803	266
15°	2662	2656	2659	2658	2652	750
25°	2398	2392	2385	2382	2390	1104
35°	1999	1997	1990	1981	1985	1251
45°	1519	1508	1492	1466	1463	1170
55°	1031	1010	984	958	951	920
65°	609	600	577	572	569	611
75°	331	323	317	331	343	353
85°	116	109	117	129	130	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2801.3	2801.3	2801.3	2801.3	2801.3
2.5°	2818.6	2804.0	2788.0	2788.0	2800.0
5°	2794.6	2794.6	2778.7	2780.0	2802.6
7.5°	2780.0	2772.0	2761.4	2761.4	2778.7
10°	2748.1	2741.4	2736.1	2733.5	2738.8
12.5°	2713.5	2702.9	2706.9	2702.9	2701.5
15°	2661.6	2656.3	2659.0	2657.6	2652.3
17.5°	2605.8	2603.1	2608.4	2599.1	2603.1
20°	2545.9	2537.9	2540.6	2535.3	2540.6
22.5°	2478.1	2472.7	2466.1	2459.4	2470.1
25°	2398.3	2391.6	2385.0	2382.3	2390.3
27.5°	2318.4	2307.8	2298.5	2295.8	2307.8
30°	2225.3	2213.4	2202.7	2200.1	2209.4
32.5°	2114.9	2112.3	2099.0	2093.7	2097.6
35°	1999.2	1996.6	1989.9	1980.6	1984.6
37.5°	1888.8	1887.5	1878.2	1862.2	1851.6
40°	1770.4	1761.1	1754.5	1731.9	1723.9
42.5°	1640.1	1637.4	1625.4	1600.2	1590.9
45°	1519.0	1508.4	1492.4	1465.8	1463.2
47.5°	1394.0	1379.4	1364.7	1331.5	1330.1
50°	1265.0	1254.3	1237.0	1203.8	1190.5
52.5°	1145.3	1130.6	1106.7	1074.8	1068.1
55°	1030.9	1009.6	984.3	957.7	951.1
57.5°	908.5	899.2	868.6	847.3	839.3
60°	800.7	792.8	762.2	742.2	742.2
62.5°	703.6	691.7	665.1	651.8	651.8
65°	609.2	599.9	577.3	572.0	569.3
67.5°	528.1	516.1	500.1	498.8	505.5
70°	457.6	442.9	429.6	442.9	446.9
72.5°	391.1	381.8	369.8	387.1	395.1
75°	331.2	323.2	316.6	331.2	343.2
77.5°	276.7	268.7	268.7	284.7	295.3
80°	222.1	216.8	222.1	235.4	246.1
82.5°	170.3	166.3	172.9	186.2	192.9
85°	115.7	109.1	117.1	129.0	130.4
87.5°	54.5	53.2	58.5	66.5	65.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)