

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: P293057

Luminaire Tested: **24GR-LD5-48-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293057
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-LD5-48-F1-UNV-L93050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4451.0 lumens
Efficiency: N/A
Efficacy: 132.1 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

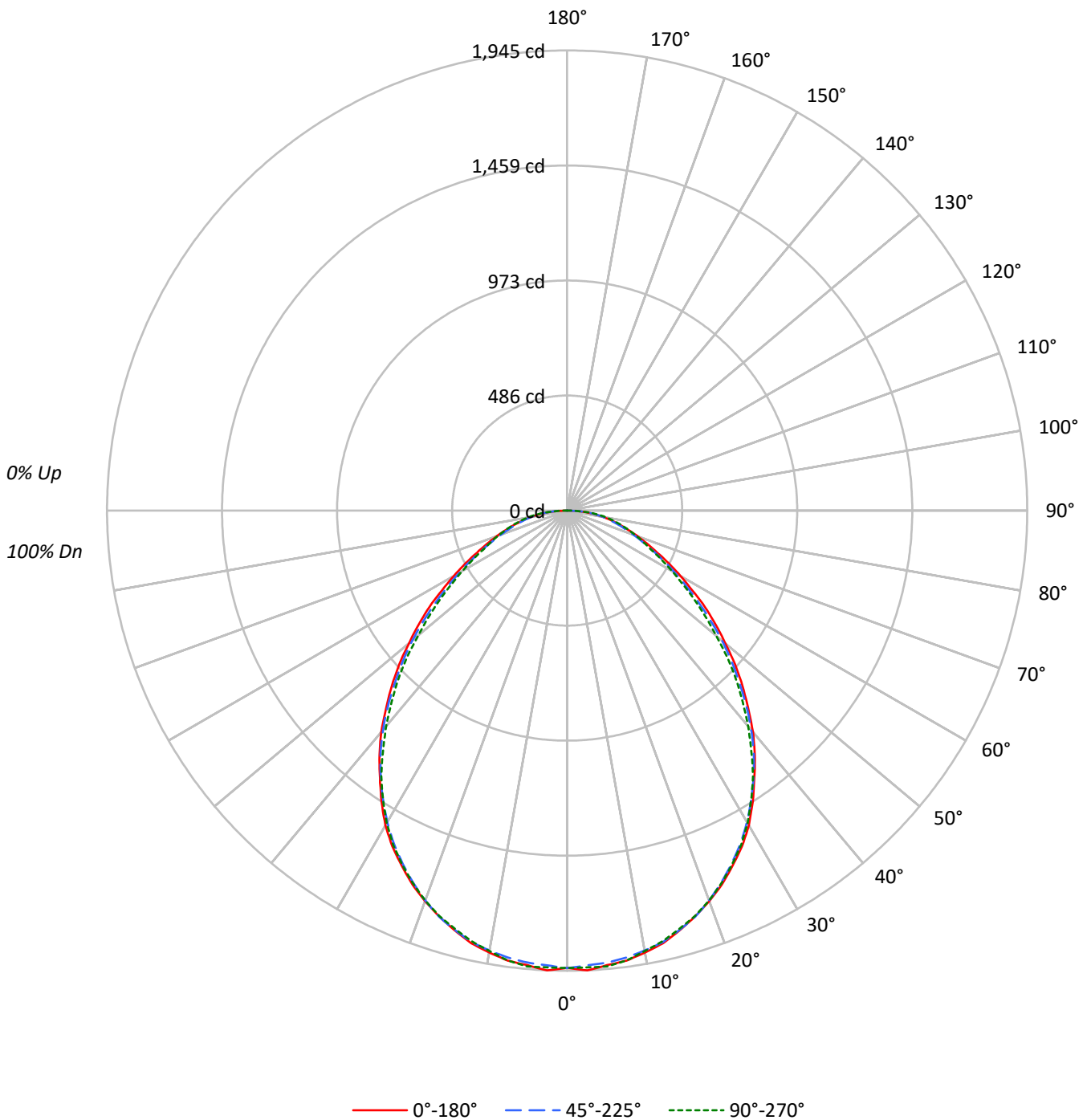
Input Watts (W): 33.682554
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2601	2601	2601
5°	2605	2590	2613
10°	2591	2580	2583
15°	2559	2556	2550
20°	2516	2511	2511
25°	2457	2444	2449
30°	2386	2362	2369
35°	2266	2256	2250
40°	2146	2127	2090
45°	1995	1960	1922
50°	1828	1787	1720
55°	1669	1594	1540
60°	1487	1415	1379
65°	1339	1268	1251
70°	1242	1166	1214
75°	1188	1136	1232
80°	1188	1188	1316
85°	1233	1247	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	4.1
10°-20°	516.7	11.6
20°-30°	758.4	17.0
30°-40°	857.4	19.3
40°-50°	792.4	17.8
50°-60°	610.5	13.7
60°-70°	404.3	9.1
70°-80°	240.7	5.4
80°-90°	88.2	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°	1457.7	32.7
0°-40°	2315.0	52.0
0°-60°	3717.9	83.5
0°-90°	4451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4451.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1933	1933	1933	1933	1933	
5°	1929	1929	1918	1919	1934	183
15°	1837	1833	1835	1834	1831	518
25°	1655	1651	1646	1644	1650	762
35°	1380	1378	1373	1367	1370	863
45°	1048	1041	1030	1012	1010	808
55°	712	697	679	661	656	635
65°	420	414	398	395	393	422
75°	229	223	218	229	237	244
85°	80	75	81	89	90	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1933.4	1933.4	1933.4	1933.4	1933.4
2.5°	1945.3	1935.2	1924.2	1924.2	1932.5
5°	1928.8	1928.8	1917.8	1918.7	1934.3
7.5°	1918.7	1913.2	1905.9	1905.9	1917.8
10°	1896.7	1892.1	1888.4	1886.6	1890.3
12.5°	1872.8	1865.5	1868.2	1865.5	1864.6
15°	1837.0	1833.3	1835.2	1834.3	1830.6
17.5°	1798.5	1796.6	1800.3	1793.9	1796.6
20°	1757.1	1751.6	1753.5	1749.8	1753.5
22.5°	1710.3	1706.7	1702.1	1697.5	1704.8
25°	1655.2	1650.7	1646.1	1644.2	1649.7
27.5°	1600.2	1592.8	1586.4	1584.6	1592.8
30°	1535.9	1527.6	1520.3	1518.5	1524.9
32.5°	1459.7	1457.9	1448.7	1445.0	1447.8
35°	1379.8	1378.0	1373.4	1367.0	1369.7
37.5°	1303.6	1302.7	1296.3	1285.3	1277.9
40°	1221.9	1215.5	1210.9	1195.3	1189.8
42.5°	1132.0	1130.1	1121.9	1104.4	1098.0
45°	1048.4	1041.1	1030.0	1011.7	1009.9
47.5°	962.1	952.0	941.9	919.0	918.0
50°	873.1	865.7	853.8	830.8	821.7
52.5°	790.4	780.3	763.8	741.8	737.2
55°	711.5	696.8	679.4	661.0	656.4
57.5°	627.0	620.6	599.5	584.8	579.3
60°	552.7	547.2	526.0	512.3	512.3
62.5°	485.6	477.4	459.0	449.8	449.8
65°	420.5	414.0	398.4	394.8	392.9
67.5°	364.5	356.2	345.2	344.3	348.9
70°	315.8	305.7	296.5	305.7	308.5
72.5°	269.9	263.5	255.2	267.2	272.7
75°	228.6	223.1	218.5	228.6	236.9
77.5°	191.0	185.4	185.4	196.5	203.8
80°	153.3	149.6	153.3	162.5	169.8
82.5°	117.5	114.8	119.3	128.5	133.1
85°	79.9	75.3	80.8	89.1	90.0
87.5°	37.6	36.7	40.4	45.9	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)