

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: P293060

Luminaire Tested: **24GR-LD5-56-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293060
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-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: 4384.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

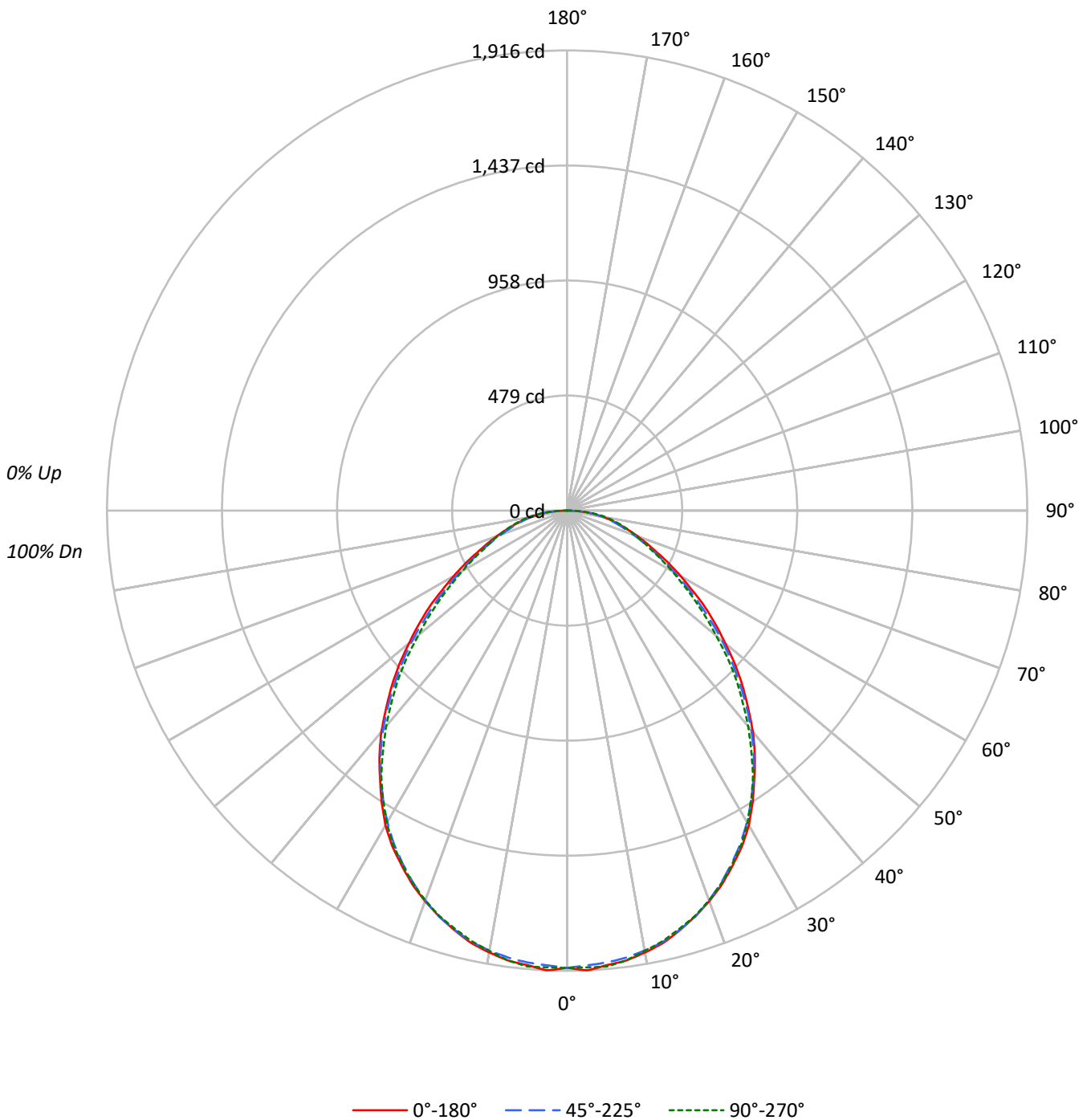
Input Watts (W): 39.863241
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2562	2562	2562
5°	2566	2551	2573
10°	2552	2541	2544
15°	2520	2518	2511
20°	2478	2473	2473
25°	2420	2407	2412
30°	2350	2326	2333
35°	2232	2222	2216
40°	2114	2095	2058
45°	1965	1930	1893
50°	1800	1760	1694
55°	1644	1570	1517
60°	1465	1394	1358
65°	1318	1249	1232
70°	1224	1149	1195
75°	1171	1119	1213
80°	1170	1170	1296
85°	1215	1229	1368



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.8	4.1
10°-20°	508.9	11.6
20°-30°	746.9	17.0
30°-40°	844.5	19.3
40°-50°	780.5	17.8
50°-60°	601.3	13.7
60°-70°	398.2	9.1
70°-80°	237.0	5.4
80°-90°	86.8	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°	1435.7	32.7
0°-40°	2280.2	52.0
0°-60°	3662.0	83.5
0°-90°	4384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4384.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1904	1904	1904	1904	1904	
5°	1900	1900	1889	1890	1905	181
15°	1809	1806	1808	1807	1803	510
25°	1630	1626	1621	1620	1625	751
35°	1359	1357	1353	1346	1349	850
45°	1033	1025	1014	996	995	795
55°	701	686	669	651	646	625
65°	414	408	392	389	387	415
75°	225	220	215	225	233	240
85°	79	74	80	88	89	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1904.3	1904.3	1904.3	1904.3	1904.3
2.5°	1916.1	1906.1	1895.3	1895.3	1903.4
5°	1899.8	1899.8	1888.9	1889.8	1905.2
7.5°	1889.8	1884.4	1877.2	1877.2	1888.9
10°	1868.1	1863.6	1860.0	1858.2	1861.8
12.5°	1844.6	1837.4	1840.1	1837.4	1836.5
15°	1809.4	1805.7	1807.6	1806.6	1803.0
17.5°	1771.4	1769.6	1773.2	1766.9	1769.6
20°	1730.7	1725.3	1727.1	1723.5	1727.1
22.5°	1684.6	1681.0	1676.4	1671.9	1679.2
25°	1630.3	1625.8	1621.3	1619.5	1624.9
27.5°	1576.1	1568.8	1562.5	1560.7	1568.8
30°	1512.8	1504.6	1497.4	1495.6	1501.9
32.5°	1437.7	1435.9	1426.9	1423.3	1426.0
35°	1359.1	1357.2	1352.7	1346.4	1349.1
37.5°	1284.0	1283.1	1276.8	1265.9	1258.7
40°	1203.5	1197.2	1192.7	1177.3	1171.9
42.5°	1114.9	1113.1	1105.0	1087.8	1081.5
45°	1032.6	1025.4	1014.5	996.5	994.7
47.5°	947.6	937.7	927.7	905.1	904.2
50°	859.9	852.7	840.9	818.3	809.3
52.5°	778.5	768.6	752.3	730.6	726.1
55°	700.8	686.3	669.1	651.0	646.5
57.5°	617.6	611.3	590.5	576.0	570.6
60°	544.3	538.9	518.1	504.6	504.6
62.5°	478.3	470.2	452.1	443.1	443.1
65°	414.1	407.8	392.4	388.8	387.0
67.5°	359.0	350.8	340.0	339.1	343.6
70°	311.1	301.1	292.1	301.1	303.8
72.5°	265.8	259.5	251.4	263.1	268.6
75°	225.2	219.7	215.2	225.2	233.3
77.5°	188.1	182.7	182.7	193.5	200.7
80°	151.0	147.4	151.0	160.0	167.3
82.5°	115.7	113.0	117.5	126.6	131.1
85°	78.7	74.1	79.6	87.7	88.6
87.5°	37.1	36.2	39.8	45.2	44.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)