

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: P293061

Luminaire Tested: **24GR-LD5-56-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293061
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4790.0 lumens
Efficiency: N/A
Efficacy: 120.6 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

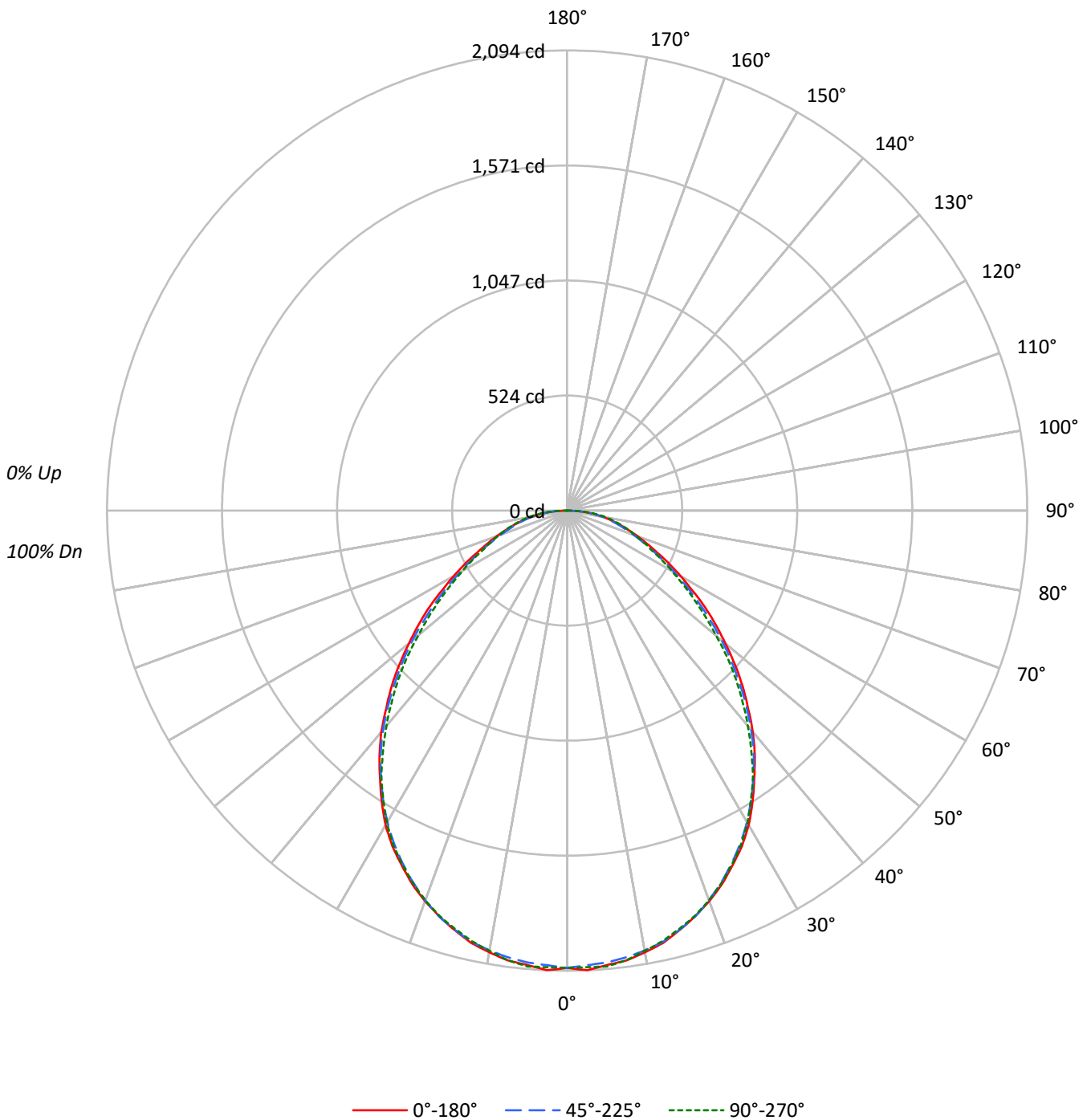
Input Watts (W): 39.707373
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2800	2800	2800
5°	2804	2788	2812
10°	2789	2777	2779
15°	2754	2751	2744
20°	2708	2702	2702
25°	2644	2630	2636
30°	2568	2542	2550
35°	2439	2428	2421
40°	2310	2289	2249
45°	2147	2109	2068
50°	1967	1923	1851
55°	1796	1715	1657
60°	1601	1523	1484
65°	1441	1365	1346
70°	1337	1255	1306
75°	1279	1222	1325
80°	1278	1278	1416
85°	1328	1342	1494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.5	4.1
10°-20°	556.1	11.6
20°-30°	816.1	17.0
30°-40°	922.7	19.3
40°-50°	852.7	17.8
50°-60°	657.0	13.7
60°-70°	435.1	9.1
70°-80°	259.0	5.4
80°-90°	94.9	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°	1568.7	32.7
0°-40°	2491.4	52.0
0°-60°	4001.1	83.5
0°-90°	4790.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4790.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2081	2081	2081	2081	2081	
5°	2076	2076	2064	2065	2082	197
15°	1977	1973	1975	1974	1970	557
25°	1781	1776	1771	1770	1775	820
35°	1485	1483	1478	1471	1474	929
45°	1128	1120	1108	1089	1087	869
55°	766	750	731	711	706	683
65°	452	446	429	425	423	454
75°	246	240	235	246	255	262
85°	86	81	87	96	97	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2080.7	2080.7	2080.7	2080.7	2080.7
2.5°	2093.5	2082.6	2070.8	2070.8	2079.7
5°	2075.7	2075.7	2063.9	2064.9	2081.7
7.5°	2064.9	2058.9	2051.0	2051.0	2063.9
10°	2041.1	2036.2	2032.3	2030.3	2034.2
12.5°	2015.5	2007.6	2010.5	2007.6	2006.6
15°	1976.9	1973.0	1974.9	1974.0	1970.0
17.5°	1935.4	1933.5	1937.4	1930.5	1933.5
20°	1891.0	1885.0	1887.0	1883.1	1887.0
22.5°	1840.6	1836.6	1831.7	1826.8	1834.7
25°	1781.3	1776.4	1771.4	1769.5	1775.4
27.5°	1722.0	1714.1	1707.2	1705.2	1714.1
30°	1652.9	1644.0	1636.1	1634.1	1641.0
32.5°	1570.9	1568.9	1559.0	1555.1	1558.0
35°	1484.9	1482.9	1478.0	1471.1	1474.0
37.5°	1402.9	1401.9	1395.0	1383.2	1375.3
40°	1315.0	1308.1	1303.1	1286.3	1280.4
42.5°	1218.2	1216.2	1207.3	1188.5	1181.6
45°	1128.3	1120.4	1108.5	1088.7	1086.8
47.5°	1035.4	1024.5	1013.7	989.0	988.0
50°	939.6	931.7	918.8	894.1	884.2
52.5°	850.6	839.8	822.0	798.3	793.3
55°	765.7	749.9	731.1	711.3	706.4
57.5°	674.8	667.9	645.1	629.3	623.4
60°	594.8	588.8	566.1	551.3	551.3
62.5°	522.6	513.7	494.0	484.1	484.1
65°	452.5	445.6	428.8	424.8	422.9
67.5°	392.2	383.3	371.5	370.5	375.4
70°	339.9	329.0	319.1	329.0	332.0
72.5°	290.5	283.5	274.7	287.5	293.4
75°	246.0	240.1	235.1	246.0	254.9
77.5°	205.5	199.6	199.6	211.4	219.3
80°	165.0	161.0	165.0	174.9	182.8
82.5°	126.5	123.5	128.4	138.3	143.3
85°	86.0	81.0	86.9	95.8	96.8
87.5°	40.5	39.5	43.5	49.4	48.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)