

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: P291766

Luminaire Tested: **22GR-LD5-43-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291766
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F1-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4615.0 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

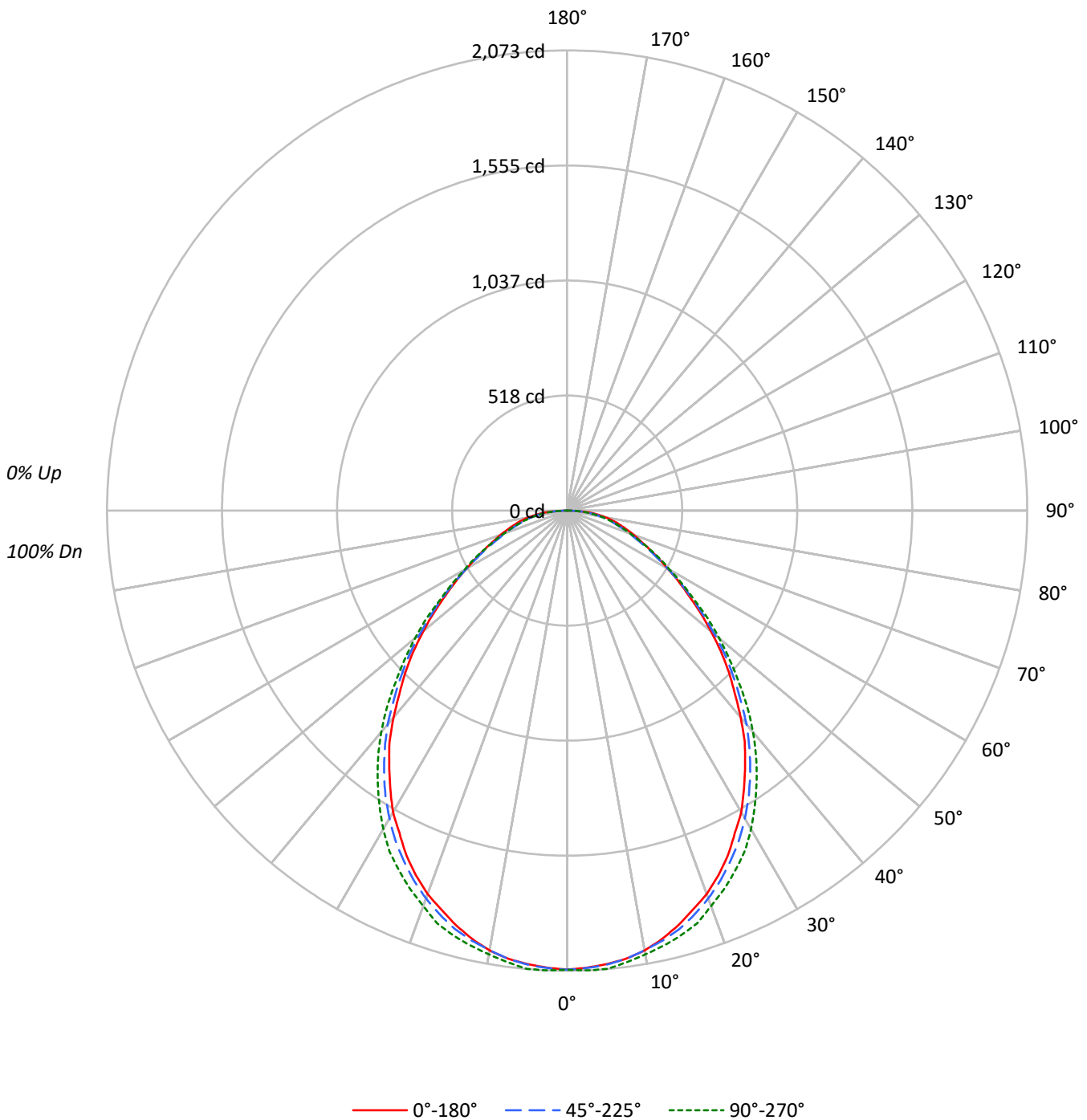
Input Watts (W): 36.921
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5565	5565	5565
5°	5541	5546	5598
10°	5497	5494	5547
15°	5387	5439	5519
20°	5264	5324	5428
25°	5089	5171	5316
30°	4875	4974	5148
35°	4590	4722	4889
40°	4271	4416	4577
45°	3921	4034	4159
50°	3537	3625	3741
55°	3138	3213	3267
60°	2813	2818	2875
65°	2592	2504	2592
70°	2502	2319	2386
75°	2546	2271	2314
80°	2743	2382	2382
85°	3044	2519	2489



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.1	4.2
10°-20°	550.2	11.9
20°-30°	803.1	17.4
30°-40°	899.1	19.5
40°-50°	818.3	17.7
50°-60°	615.9	13.3
60°-70°	401.9	8.7
70°-80°	241.0	5.2
80°-90°	90.4	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°	1548.4	33.6
0°-40°	2447.5	53.0
0°-60°	3881.7	84.1
0°-90°	4615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4615.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2051	2048	2053	2061	2072	195
15°	1934	1936	1952	1968	1981	545
25°	1714	1719	1742	1773	1790	787
35°	1397	1410	1437	1471	1488	873
45°	1030	1041	1060	1082	1093	793
55°	669	678	685	694	696	604
65°	407	403	393	400	407	407
75°	245	236	218	219	223	260
85°	99	95	82	77	81	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2068.1	2068.1	2068.1	2068.1	2068.1
2.5°	2060.7	2059.6	2062.8	2068.1	2073.4
5°	2051.1	2047.9	2053.2	2060.7	2072.3
7.5°	2036.3	2036.3	2036.3	2050.1	2052.2
10°	2011.9	2014.0	2010.8	2024.6	2029.9
12.5°	1976.9	1978.0	1984.3	1998.1	2007.7
15°	1933.5	1935.6	1952.5	1968.4	1981.2
17.5°	1884.7	1892.1	1908.0	1933.5	1949.4
20°	1838.1	1846.5	1859.3	1886.8	1895.3
22.5°	1778.7	1788.2	1804.1	1828.5	1846.5
25°	1714.0	1719.3	1741.6	1773.4	1790.4
27.5°	1636.7	1648.3	1675.9	1708.7	1732.1
30°	1568.8	1575.2	1600.6	1638.8	1656.8
32.5°	1483.0	1502.0	1523.2	1557.2	1574.1
35°	1397.1	1409.8	1437.4	1471.3	1488.3
37.5°	1314.4	1321.8	1349.4	1378.0	1399.2
40°	1215.8	1229.6	1257.2	1287.9	1302.8
42.5°	1117.3	1137.4	1155.4	1186.2	1202.1
45°	1030.3	1040.9	1060.0	1082.3	1092.9
47.5°	939.2	944.5	966.7	980.5	992.2
50°	844.8	851.2	866.0	879.8	893.6
52.5°	757.9	763.2	772.7	785.5	799.2
55°	668.9	678.4	684.8	694.3	696.4
57.5°	596.8	595.7	600.0	607.4	614.8
60°	522.6	524.7	523.6	531.1	534.2
62.5°	461.1	460.0	453.7	464.3	472.8
65°	407.0	402.8	393.3	399.6	407.0
67.5°	357.2	355.1	339.2	344.5	350.9
70°	318.0	310.6	294.7	297.9	303.2
72.5°	279.8	271.4	255.5	256.5	259.7
75°	244.9	236.4	218.4	219.4	222.6
77.5°	212.0	201.4	185.5	183.4	185.5
80°	177.0	167.5	153.7	147.3	153.7
82.5°	141.0	135.7	119.8	113.4	115.5
85°	98.6	95.4	81.6	77.4	80.6
87.5°	45.6	48.8	41.3	38.2	39.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)