

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: P291761

Luminaire Tested: **22GR-LD5-40-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291761
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-LD5-40-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: 4323.0 lumens
Efficiency: N/A
Efficacy: 127.4 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

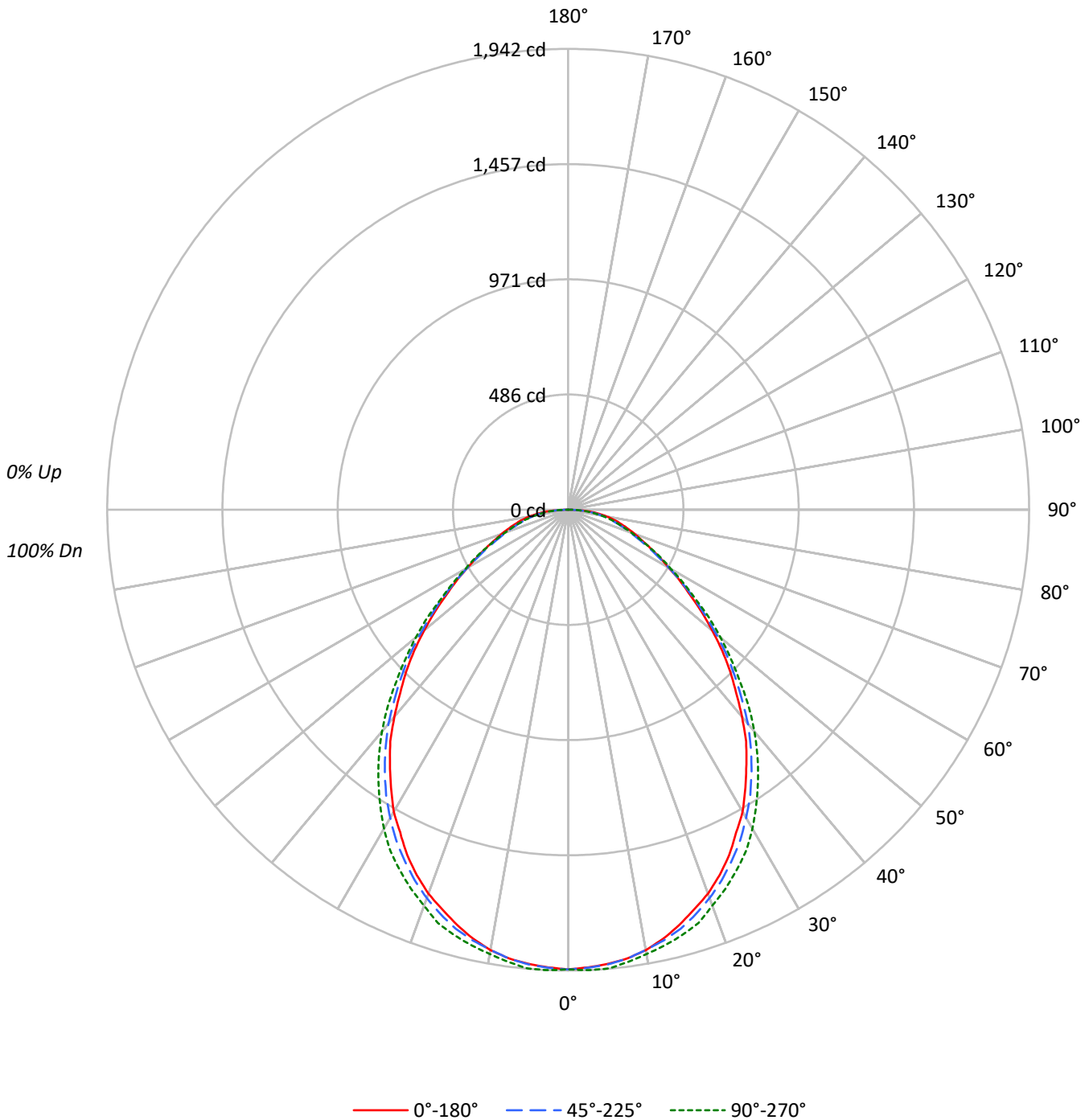
Input Watts (W): 33.945
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5213	5213	5213
5°	5190	5195	5244
10°	5150	5147	5196
15°	5046	5095	5170
20°	4931	4987	5084
25°	4767	4844	4980
30°	4566	4659	4822
35°	4299	4423	4580
40°	4001	4137	4287
45°	3673	3779	3896
50°	3313	3396	3504
55°	2939	3009	3061
60°	2634	2640	2693
65°	2428	2346	2428
70°	2344	2172	2234
75°	2385	2126	2168
80°	2569	2232	2232
85°	2850	2362	2331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.7	4.2
10°-20°	515.4	11.9
20°-30°	752.3	17.4
30°-40°	842.2	19.5
40°-50°	766.5	17.7
50°-60°	576.9	13.3
60°-70°	376.5	8.7
70°-80°	225.8	5.2
80°-90°	84.7	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°	1450.4	33.6
0°-40°	2292.6	53.0
0°-60°	3636.0	84.1
0°-90°	4323.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4323.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1937	1937	1937	1937	1937	
5°	1921	1918	1923	1930	1941	182
15°	1811	1813	1829	1844	1856	510
25°	1606	1611	1631	1661	1677	737
35°	1309	1321	1346	1378	1394	818
45°	965	975	993	1014	1024	743
55°	626	636	641	650	652	566
65°	381	377	368	374	381	381
75°	229	221	204	206	208	243
85°	92	89	76	72	76	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1937.2	1937.2	1937.2	1937.2	1937.2
2.5°	1930.3	1929.3	1932.3	1937.2	1942.2
5°	1921.3	1918.4	1923.3	1930.3	1941.2
7.5°	1907.4	1907.4	1907.4	1920.3	1922.3
10°	1884.6	1886.6	1883.6	1896.5	1901.5
12.5°	1851.8	1852.8	1858.8	1871.7	1880.6
15°	1811.1	1813.1	1829.0	1843.9	1855.8
17.5°	1765.5	1772.4	1787.3	1811.1	1826.0
20°	1721.8	1729.7	1741.6	1767.4	1775.4
22.5°	1666.2	1675.1	1690.0	1712.8	1729.7
25°	1605.6	1610.6	1631.4	1661.2	1677.1
27.5°	1533.1	1544.0	1569.8	1600.6	1622.5
30°	1469.6	1475.5	1499.3	1535.1	1552.0
32.5°	1389.1	1407.0	1426.9	1458.6	1474.5
35°	1308.7	1320.6	1346.4	1378.2	1394.1
37.5°	1231.2	1238.2	1264.0	1290.8	1310.7
40°	1138.9	1151.8	1177.6	1206.4	1220.3
42.5°	1046.6	1065.4	1082.3	1111.1	1126.0
45°	965.1	975.1	992.9	1013.8	1023.7
47.5°	879.7	884.7	905.6	918.5	929.4
50°	791.4	797.3	811.2	824.1	837.1
52.5°	710.0	714.9	723.9	735.8	748.7
55°	626.5	635.5	641.4	650.4	652.4
57.5°	559.0	558.0	562.0	569.0	575.9
60°	489.5	491.5	490.5	497.5	500.4
62.5°	431.9	430.9	425.0	434.9	442.9
65°	381.3	377.3	368.4	374.3	381.3
67.5°	334.6	332.6	317.7	322.7	328.7
70°	297.9	290.9	276.0	279.0	284.0
72.5°	262.1	254.2	239.3	240.3	243.3
75°	229.4	221.4	204.5	205.5	208.5
77.5°	198.6	188.7	173.8	171.8	173.8
80°	165.8	156.9	144.0	138.0	144.0
82.5°	132.1	127.1	112.2	106.2	108.2
85°	92.3	89.4	76.5	72.5	75.5
87.5°	42.7	45.7	38.7	35.7	36.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)