

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: P292550

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-A19/156-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4544.0 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

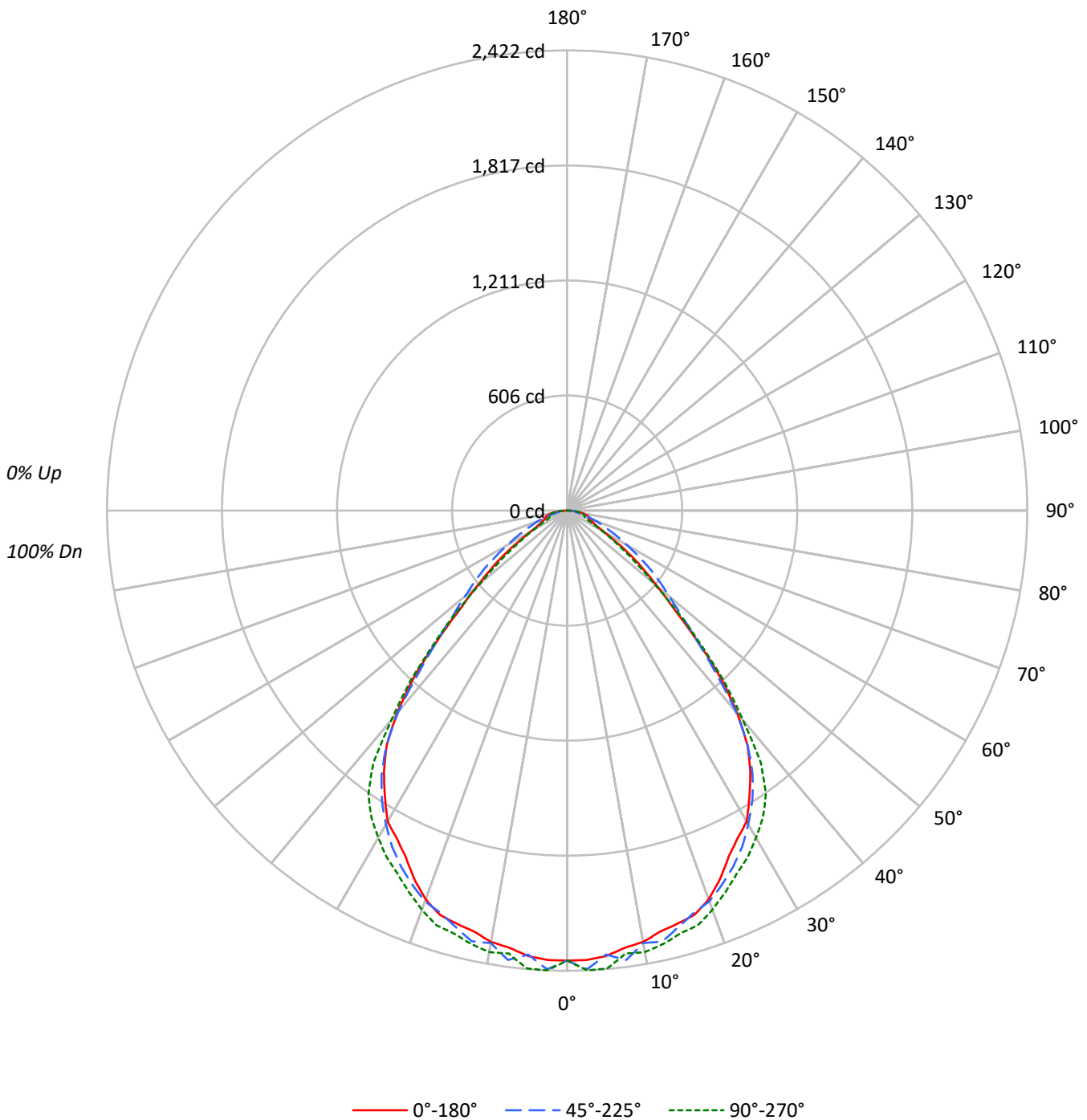
Input Watts (W): 36.921
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6373	6373	6373
5°	6357	6336	6536
10°	6298	6316	6448
15°	6269	6317	6419
20°	6236	6267	6401
25°	5970	6138	6266
30°	5872	5925	6178
35°	5522	5592	5990
40°	4893	4859	5051
45°	3655	3663	3765
50°	2573	2927	2492
55°	1899	2471	1703
60°	1187	1953	1112
65°	968	1547	777
70°	961	1289	766
75°	1192	946	991
80°	1327	747	1212
85°	1321	1389	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.4	5.0
10°-20°	642.1	14.1
20°-30°	951.0	20.9
30°-40°	1065.3	23.4
40°-50°	782.8	17.2
50°-60°	437.5	9.6
60°-70°	243.9	5.4
70°-80°	143.3	3.2
80°-90°	52.7	1.2
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°	1818.6	40.0
0°-40°	2883.9	63.5
0°-60°	4104.2	90.3
0°-90°	4544.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4544.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2368	2368	2368	2368	2368	
5°	2353	2397	2346	2394	2420	223
15°	2250	2264	2268	2302	2304	636
25°	2011	2027	2067	2096	2110	932
35°	1681	1682	1702	1779	1823	1041
45°	960	1038	962	1031	989	750
55°	405	492	527	526	363	361
65°	152	270	243	312	122	157
75°	115	162	91	183	95	115
85°	43	63	45	58	44	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2368.2	2368.2	2368.2	2368.2	2368.2
2.5°	2367.1	2388.5	2416.4	2419.6	2421.7
5°	2353.2	2397.1	2345.7	2393.9	2419.6
7.5°	2321.1	2347.9	2385.3	2337.2	2351.1
10°	2305.0	2311.5	2311.5	2371.4	2359.6
12.5°	2268.6	2311.5	2322.2	2310.4	2336.1
15°	2250.4	2264.4	2267.6	2301.8	2304.0
17.5°	2230.1	2226.9	2219.4	2244.0	2287.9
20°	2177.6	2165.9	2188.3	2218.3	2235.4
22.5°	2100.6	2103.8	2130.5	2155.2	2174.4
25°	2010.6	2026.7	2067.4	2096.3	2110.2
27.5°	1943.2	1966.7	1994.6	2028.8	2056.7
30°	1889.6	1887.5	1906.8	1956.0	1988.1
32.5°	1785.8	1793.3	1813.6	1872.5	1917.5
35°	1680.9	1681.9	1702.3	1779.4	1823.3
37.5°	1559.9	1551.3	1563.1	1646.6	1675.5
40°	1392.9	1395.0	1383.2	1442.1	1437.8
42.5°	1198.0	1215.2	1154.1	1231.2	1225.9
45°	960.3	1038.5	962.5	1031.0	989.3
47.5°	758.0	873.6	810.5	860.8	782.6
50°	614.5	733.4	699.1	721.6	595.3
52.5°	504.3	600.6	611.3	616.7	464.6
55°	404.7	492.5	526.7	525.7	362.9
57.5°	298.7	400.4	440.0	456.1	275.1
60°	220.5	333.0	362.9	398.3	206.6
62.5°	177.7	292.3	299.8	349.0	157.4
65°	152.0	269.8	243.0	311.5	122.1
67.5°	134.9	251.6	198.1	278.4	103.8
70°	122.1	223.8	163.8	249.5	97.4
72.5°	118.8	190.6	126.3	222.7	96.4
75°	114.6	161.7	91.0	183.1	95.3
77.5°	98.5	138.1	65.3	141.3	88.9
80°	85.6	110.3	48.2	106.0	78.2
82.5°	66.4	83.5	42.8	80.3	63.2
85°	42.8	63.2	45.0	57.8	43.9
87.5°	20.3	35.3	32.1	31.0	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)