

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: P294002

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294002
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4794.0 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

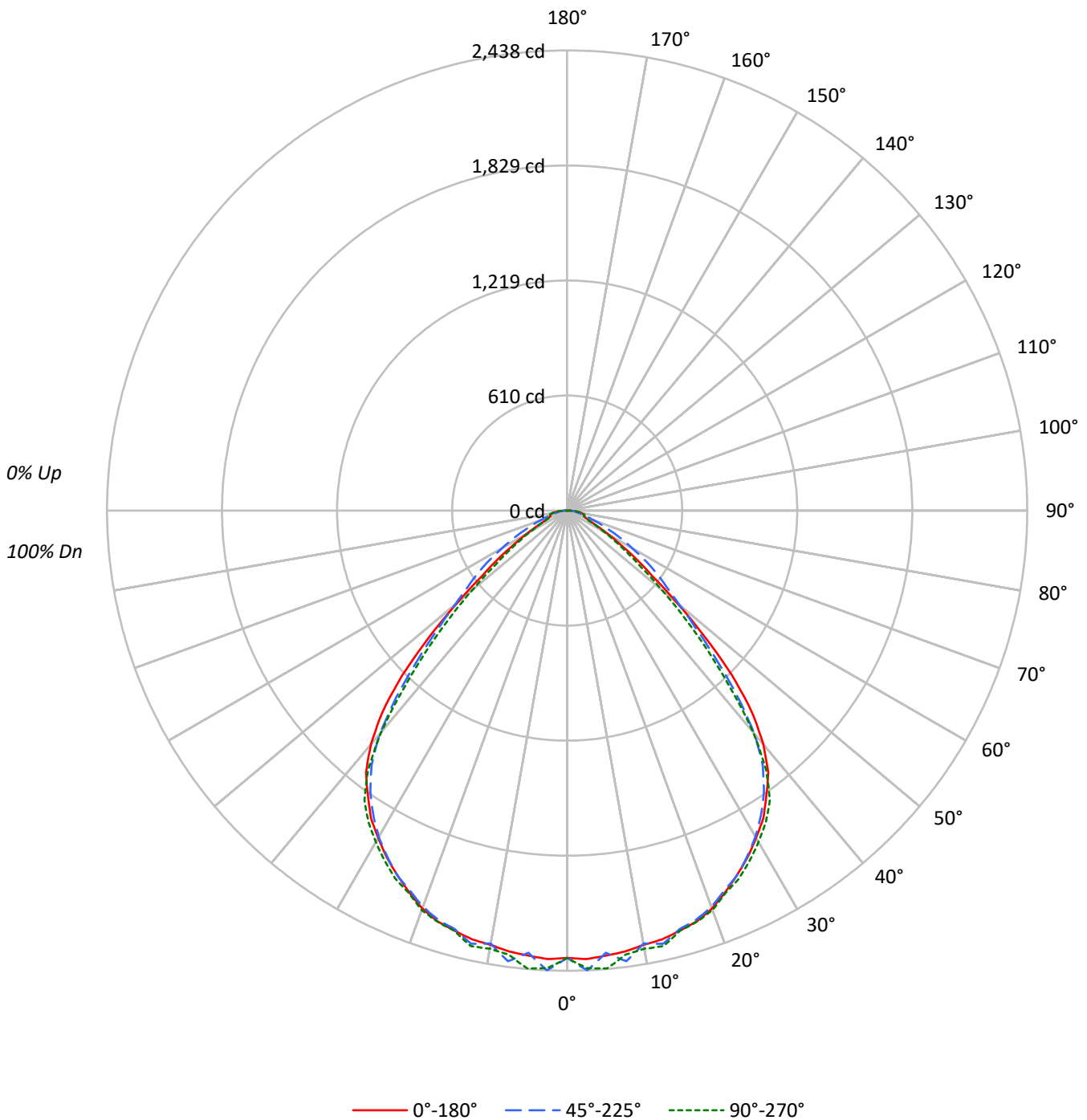
Input Watts (W): 33.48
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3189	3189	3189
5°	3196	3176	3288
10°	3191	3182	3221
15°	3210	3199	3212
20°	3212	3199	3226
25°	3163	3165	3196
30°	3110	3100	3151
35°	3022	2986	3075
40°	2838	2711	2696
45°	2353	2129	2019
50°	1582	1615	1379
55°	1044	1354	905
60°	669	1069	619
65°	431	816	419
70°	382	585	382
75°	492	464	496
80°	603	400	632
85°	701	594	736



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.0	4.7
10°-20°	651.7	13.6
20°-30°	981.1	20.5
30°-40°	1137.2	23.7
40°-50°	888.3	18.5
50°-60°	474.3	9.9
60°-70°	243.9	5.1
70°-80°	138.0	2.9
80°-90°	52.4	1.1
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°	1859.8	38.8
0°-40°	2997.0	62.5
0°-60°	4359.7	90.9
0°-90°	4794.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4794.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2370	2370	2370	2370	2370	
5°	2367	2433	2351	2416	2434	225
15°	2304	2319	2297	2311	2306	651
25°	2130	2123	2132	2129	2153	982
35°	1840	1832	1818	1854	1872	1147
45°	1236	1237	1119	1109	1061	932
55°	445	563	577	520	386	411
65°	136	283	256	282	132	149
75°	95	178	89	166	96	96
85°	45	59	38	59	48	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2370.5	2370.5	2370.5	2370.5	2370.5
2.5°	2378.2	2421.3	2438.2	2417.5	2426.7
5°	2366.6	2432.9	2351.2	2415.9	2434.4
7.5°	2355.9	2348.9	2408.2	2346.6	2372.8
10°	2335.9	2340.5	2328.9	2372.8	2357.4
12.5°	2326.6	2353.6	2351.2	2328.9	2362.8
15°	2304.3	2318.9	2296.6	2311.2	2305.8
17.5°	2282.0	2275.0	2272.7	2278.9	2284.3
20°	2243.5	2220.4	2234.2	2235.8	2252.7
22.5°	2188.0	2174.2	2177.3	2191.1	2192.7
25°	2130.3	2123.4	2131.8	2128.7	2152.6
27.5°	2070.2	2061.0	2066.4	2077.9	2092.6
30°	2001.7	1999.4	1995.6	2005.6	2027.9
32.5°	1934.0	1915.5	1912.4	1933.2	1958.6
35°	1840.0	1831.6	1817.7	1853.9	1872.4
37.5°	1750.7	1724.6	1702.2	1723.8	1731.5
40°	1616.0	1596.0	1543.6	1545.9	1535.2
42.5°	1450.5	1435.8	1335.8	1318.1	1288.0
45°	1236.4	1237.2	1118.7	1108.6	1060.9
47.5°	987.8	1031.7	928.5	916.9	846.1
50°	756.0	835.3	771.4	753.0	659.0
52.5°	567.4	683.7	663.6	623.6	494.3
55°	445.0	562.8	577.4	520.4	385.7
57.5°	334.9	463.5	487.3	440.4	297.9
60°	248.7	390.3	397.3	378.8	230.2
62.5°	184.8	331.8	322.6	324.9	170.9
65°	135.5	282.6	256.4	281.8	131.7
67.5°	110.9	244.8	199.4	244.1	107.0
70°	97.0	217.1	148.6	214.8	97.0
72.5°	93.9	199.4	117.8	190.9	94.7
75°	94.7	177.8	89.3	166.3	95.5
77.5°	87.0	146.3	67.8	141.7	90.8
80°	77.8	110.9	51.6	112.4	81.6
82.5°	66.2	80.8	41.6	83.1	68.5
85°	45.4	59.3	38.5	59.3	47.7
87.5°	21.6	35.4	23.9	33.9	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)