

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: P294001

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294001
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-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4711.0 lumens
Efficiency: N/A
Efficacy: 141.9 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

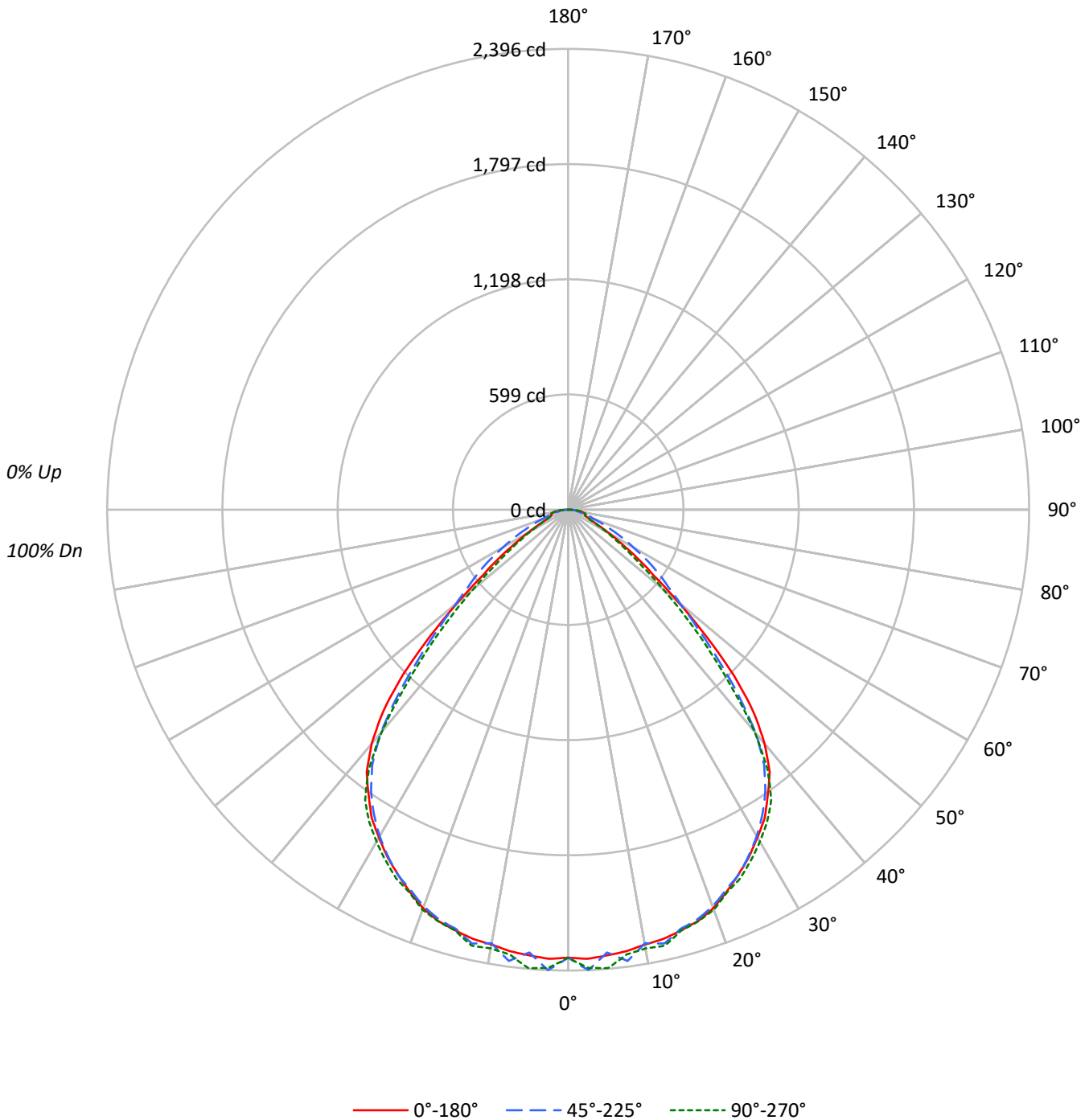
Input Watts (W): 33.201
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3134	3134	3134
5°	3141	3121	3231
10°	3136	3127	3165
15°	3154	3144	3156
20°	3157	3144	3170
25°	3108	3110	3140
30°	3056	3047	3096
35°	2970	2934	3022
40°	2789	2664	2650
45°	2312	2092	1984
50°	1555	1587	1356
55°	1026	1331	889
60°	658	1051	609
65°	424	802	412
70°	375	574	375
75°	484	456	488
80°	592	393	621
85°	689	584	724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	4.7
10°-20°	640.4	13.6
20°-30°	964.2	20.5
30°-40°	1117.5	23.7
40°-50°	873.0	18.5
50°-60°	466.1	9.9
60°-70°	239.7	5.1
70°-80°	135.6	2.9
80°-90°	51.5	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°	1827.6	38.8
0°-40°	2945.1	62.5
0°-60°	4284.2	90.9
0°-90°	4711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2330	2330	2330	2330	2330	
5°	2326	2391	2310	2374	2392	221
15°	2264	2279	2257	2271	2266	640
25°	2093	2087	2095	2092	2115	965
35°	1808	1800	1786	1822	1840	1127
45°	1215	1216	1099	1089	1042	916
55°	437	553	567	511	379	404
65°	133	278	252	277	129	146
75°	93	175	88	163	94	94
85°	45	58	38	58	47	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2329.5	2329.5	2329.5	2329.5	2329.5
2.5°	2337.0	2379.4	2396.0	2375.6	2384.7
5°	2325.7	2390.7	2310.5	2374.1	2392.2
7.5°	2315.1	2308.3	2366.5	2306.0	2331.7
10°	2295.4	2299.9	2288.6	2331.7	2316.6
12.5°	2286.3	2312.8	2310.5	2288.6	2321.9
15°	2264.4	2278.8	2256.8	2271.2	2265.9
17.5°	2242.4	2235.6	2233.4	2239.4	2244.7
20°	2204.6	2181.9	2195.5	2197.1	2213.7
22.5°	2150.1	2136.5	2139.6	2153.2	2154.7
25°	2093.4	2086.6	2094.9	2091.9	2115.3
27.5°	2034.4	2025.3	2030.6	2042.0	2056.3
30°	1967.1	1964.8	1961.0	1970.8	1992.8
32.5°	1900.5	1882.3	1879.3	1899.7	1924.7
35°	1808.2	1799.9	1786.2	1821.8	1840.0
37.5°	1720.4	1694.7	1672.8	1693.9	1701.5
40°	1588.0	1568.4	1516.9	1519.2	1508.6
42.5°	1425.4	1411.0	1312.6	1295.2	1265.7
45°	1215.0	1215.8	1099.3	1089.4	1042.5
47.5°	970.7	1013.8	912.4	901.1	831.5
50°	742.9	820.9	758.1	739.9	647.6
52.5°	557.6	671.8	652.2	612.8	485.7
55°	437.3	553.0	567.4	511.4	379.0
57.5°	329.1	455.5	478.9	432.8	292.8
60°	244.4	383.6	390.4	372.2	226.2
62.5°	181.6	326.1	317.0	319.3	168.0
65°	133.2	277.7	251.9	276.9	129.4
67.5°	108.9	240.6	195.9	239.8	105.2
70°	95.3	213.4	146.0	211.1	95.3
72.5°	92.3	195.9	115.8	187.6	93.1
75°	93.1	174.8	87.8	163.4	93.8
77.5°	85.5	143.7	66.6	139.2	89.3
80°	76.4	108.9	50.7	110.5	80.2
82.5°	65.1	79.4	40.9	81.7	67.3
85°	44.6	58.3	37.8	58.3	46.9
87.5°	21.2	34.8	23.5	33.3	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)