

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: P293999

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293999
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-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4456.0 lumens
Efficiency: N/A
Efficacy: 136.5 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

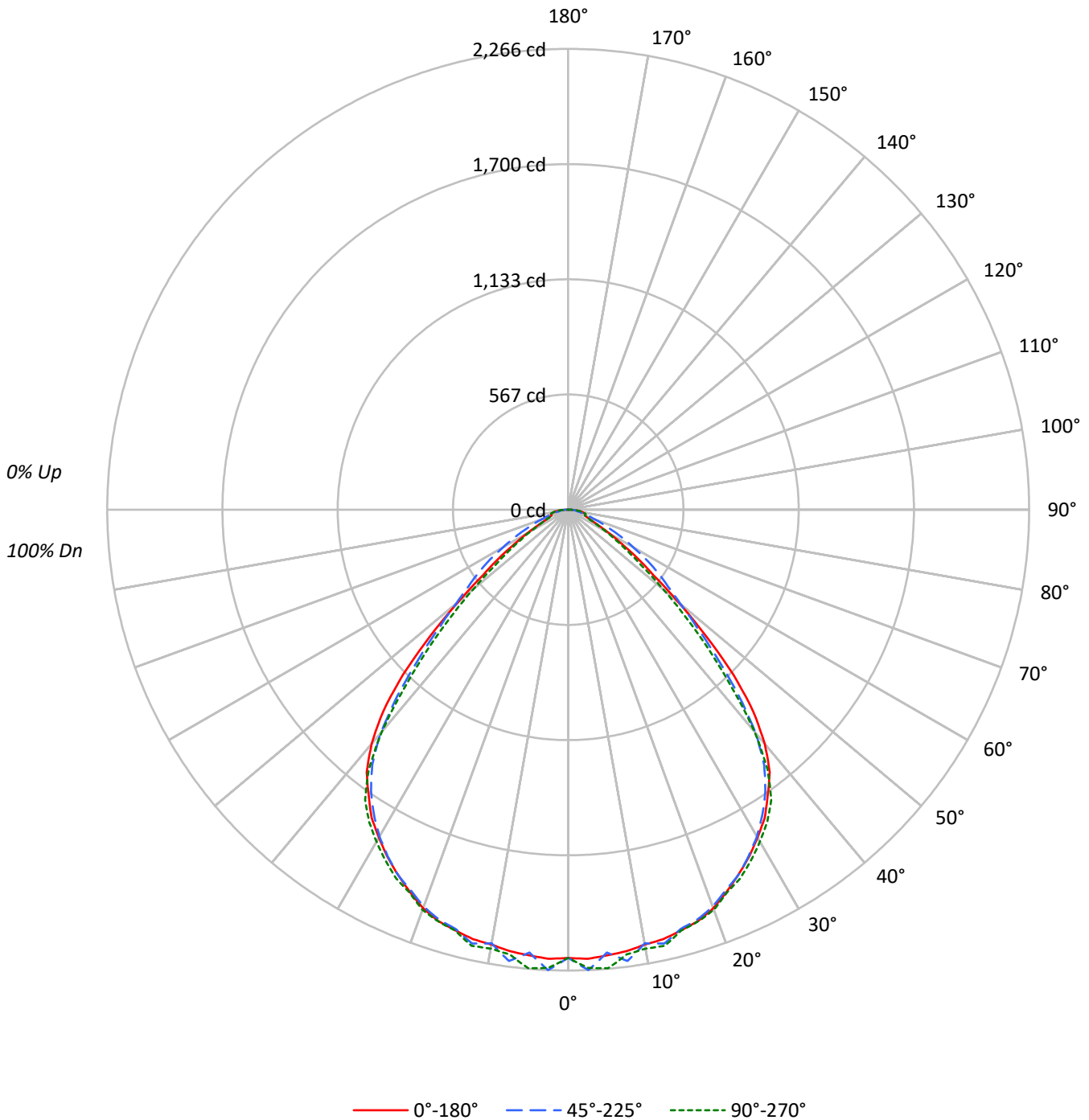
Input Watts (W): 32.643
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2965	2965	2965
5°	2971	2952	3056
10°	2966	2958	2994
15°	2983	2974	2986
20°	2986	2974	2998
25°	2940	2942	2970
30°	2891	2882	2928
35°	2809	2775	2859
40°	2638	2520	2506
45°	2187	1979	1876
50°	1471	1501	1282
55°	970	1259	841
60°	622	994	576
65°	401	759	390
70°	355	543	355
75°	457	431	461
80°	560	371	588
85°	651	553	685



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.0	4.7
10°-20°	605.8	13.6
20°-30°	912.0	20.5
30°-40°	1057.0	23.7
40°-50°	825.7	18.5
50°-60°	440.9	9.9
60°-70°	226.7	5.1
70°-80°	128.3	2.9
80°-90°	48.7	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°	1728.7	38.8
0°-40°	2785.7	62.5
0°-60°	4052.3	90.9
0°-90°	4456.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4456.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2203	2203	2203	2203	2203	
5°	2200	2261	2186	2246	2263	209
15°	2142	2155	2135	2148	2143	605
25°	1980	1974	1982	1979	2001	912
35°	1710	1702	1690	1723	1740	1066
45°	1149	1150	1040	1030	986	866
55°	414	523	537	484	358	382
65°	126	263	238	262	122	138
75°	88	165	83	155	89	89
85°	42	55	36	55	44	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2203.4	2203.4	2203.4	2203.4	2203.4
2.5°	2210.5	2250.6	2266.3	2247.0	2255.6
5°	2199.8	2261.3	2185.5	2245.6	2262.8
7.5°	2189.8	2183.3	2238.4	2181.2	2205.5
10°	2171.2	2175.5	2164.7	2205.5	2191.2
12.5°	2162.6	2187.6	2185.5	2164.7	2196.2
15°	2141.8	2155.4	2134.7	2148.3	2143.3
17.5°	2121.1	2114.6	2112.5	2118.2	2123.2
20°	2085.3	2063.8	2076.7	2078.1	2093.9
22.5°	2033.8	2020.9	2023.7	2036.6	2038.1
25°	1980.1	1973.7	1981.5	1978.7	2000.8
27.5°	1924.3	1915.7	1920.7	1931.4	1945.0
30°	1860.6	1858.4	1854.9	1864.2	1884.9
32.5°	1797.6	1780.4	1777.6	1796.9	1820.5
35°	1710.3	1702.4	1689.6	1723.2	1740.4
37.5°	1627.3	1603.0	1582.2	1602.3	1609.4
40°	1502.1	1483.5	1434.8	1436.9	1426.9
42.5°	1348.2	1334.6	1241.6	1225.1	1197.2
45°	1149.3	1150.0	1039.8	1030.5	986.1
47.5°	918.1	958.9	863.0	852.3	786.5
50°	702.7	776.4	717.0	699.9	612.6
52.5°	527.4	635.5	616.9	579.6	459.4
55°	413.6	523.1	536.7	483.8	358.5
57.5°	311.3	430.8	453.0	409.3	276.9
60°	231.1	362.8	369.3	352.1	214.0
62.5°	171.7	308.4	299.8	302.0	158.9
65°	125.9	262.6	238.3	261.9	122.4
67.5°	103.0	227.6	185.3	226.8	99.5
70°	90.2	201.8	138.1	199.7	90.2
72.5°	87.3	185.3	109.5	177.5	88.0
75°	88.0	165.3	83.0	154.6	88.7
77.5°	80.9	136.0	63.0	131.7	84.4
80°	72.3	103.0	47.9	104.5	75.9
82.5°	61.5	75.1	38.6	77.3	63.7
85°	42.2	55.1	35.8	55.1	44.4
87.5°	20.0	32.9	22.2	31.5	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)