

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: P294000

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294000
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4609.0 lumens
Efficiency: N/A
Efficacy: 139.6 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

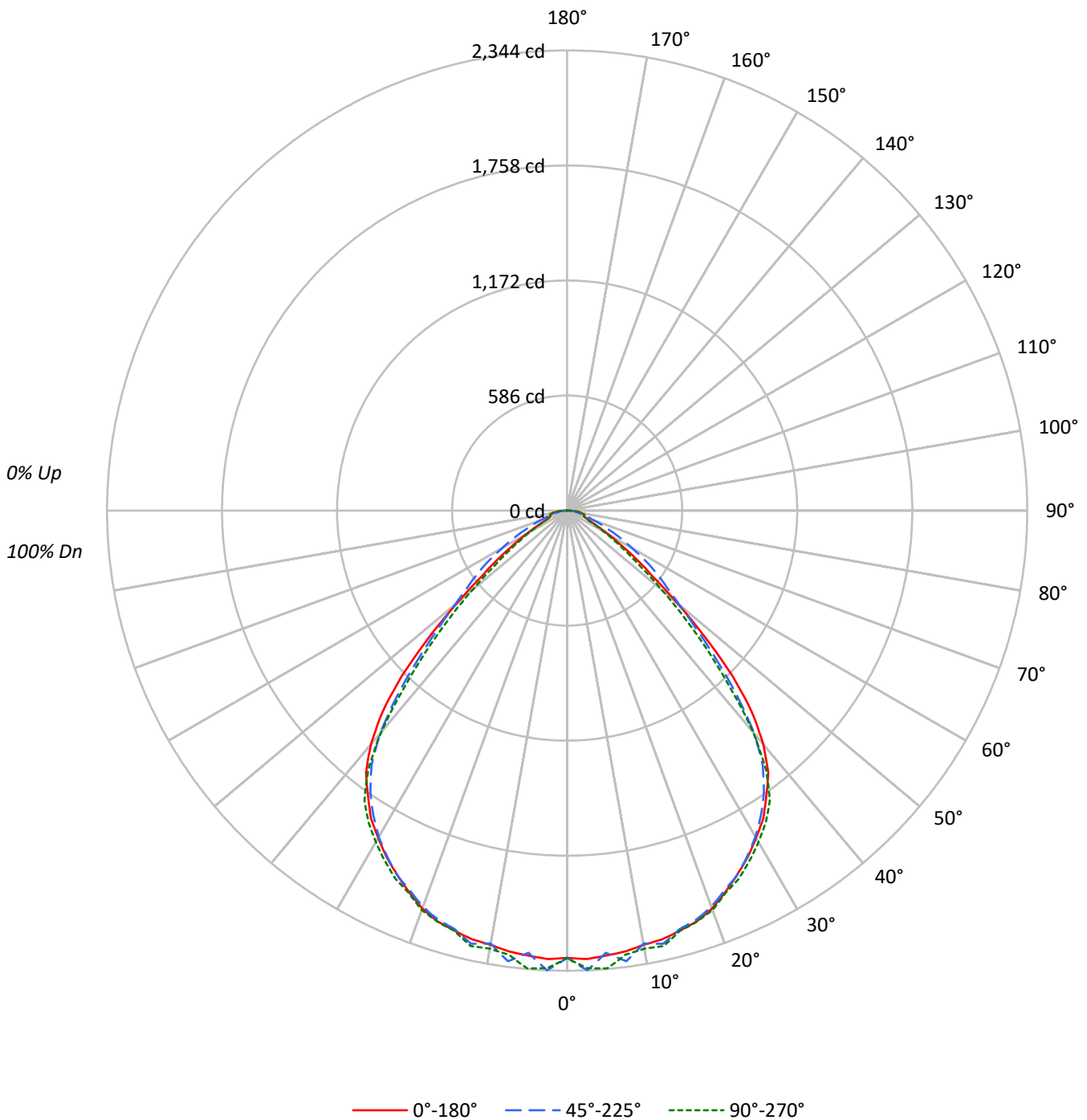
Input Watts (W): 33.015
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3066	3066	3066
5°	3073	3053	3161
10°	3068	3059	3096
15°	3086	3076	3088
20°	3088	3076	3101
25°	3041	3043	3072
30°	2990	2981	3029
35°	2906	2871	2957
40°	2729	2607	2592
45°	2262	2046	1941
50°	1522	1553	1326
55°	1004	1302	870
60°	643	1028	596
65°	415	785	403
70°	367	562	367
75°	473	447	477
80°	580	384	608
85°	675	571	709



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.2	4.7
10°-20°	626.6	13.6
20°-30°	943.3	20.5
30°-40°	1093.3	23.7
40°-50°	854.1	18.5
50°-60°	456.0	9.9
60°-70°	234.5	5.1
70°-80°	132.7	2.9
80°-90°	50.4	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°	1788.0	38.8
0°-40°	2881.4	62.5
0°-60°	4191.5	90.9
0°-90°	4609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4609.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2279	2279	2279	2279	2279	
5°	2275	2339	2260	2323	2340	216
15°	2215	2229	2208	2222	2217	626
25°	2048	2041	2050	2047	2070	944
35°	1769	1761	1748	1782	1800	1103
45°	1189	1190	1076	1066	1020	896
55°	428	541	555	500	371	395
65°	130	272	246	271	127	143
75°	91	171	86	160	92	92
85°	44	57	37	57	46	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2279.0	2279.0	2279.0	2279.0	2279.0
2.5°	2286.4	2327.9	2344.2	2324.2	2333.1
5°	2275.3	2339.0	2260.5	2322.7	2340.5
7.5°	2265.0	2258.3	2315.3	2256.1	2281.2
10°	2245.7	2250.2	2239.0	2281.2	2266.4
12.5°	2236.8	2262.7	2260.5	2239.0	2271.6
15°	2215.4	2229.4	2208.0	2222.0	2216.8
17.5°	2193.9	2187.2	2185.0	2190.9	2196.1
20°	2156.9	2134.7	2148.0	2149.5	2165.8
22.5°	2103.6	2090.3	2093.2	2106.6	2108.0
25°	2048.1	2041.4	2049.6	2046.6	2069.5
27.5°	1990.3	1981.5	1986.6	1997.7	2011.8
30°	1924.5	1922.3	1918.6	1928.2	1949.6
32.5°	1859.3	1841.6	1838.6	1858.6	1883.0
35°	1769.0	1760.9	1747.6	1782.4	1800.1
37.5°	1683.2	1658.0	1636.5	1657.3	1664.7
40°	1553.6	1534.4	1484.1	1486.3	1475.9
42.5°	1394.5	1380.4	1284.2	1267.2	1238.3
45°	1188.7	1189.5	1075.5	1065.9	1020.0
47.5°	949.7	991.8	892.7	881.6	813.5
50°	726.9	803.1	741.7	723.9	633.6
52.5°	545.5	657.3	638.0	599.5	475.2
55°	427.8	541.1	555.1	500.4	370.8
57.5°	322.0	445.6	468.5	423.4	286.5
60°	239.1	375.3	381.9	364.2	221.3
62.5°	177.6	319.0	310.1	312.4	164.3
65°	130.3	271.6	246.5	270.9	126.6
67.5°	106.6	235.4	191.7	234.6	102.9
70°	93.3	208.7	142.9	206.5	93.3
72.5°	90.3	191.7	113.2	183.6	91.0
75°	91.0	171.0	85.9	159.9	91.8
77.5°	83.6	140.6	65.1	136.2	87.3
80°	74.8	106.6	49.6	108.1	78.5
82.5°	63.7	77.7	40.0	79.9	65.9
85°	43.7	57.0	37.0	57.0	45.9
87.5°	20.7	34.0	22.9	32.6	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)