

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: P294128

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294128
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-L92765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4276.0 lumens
Efficiency: N/A
Efficacy: 127.7 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

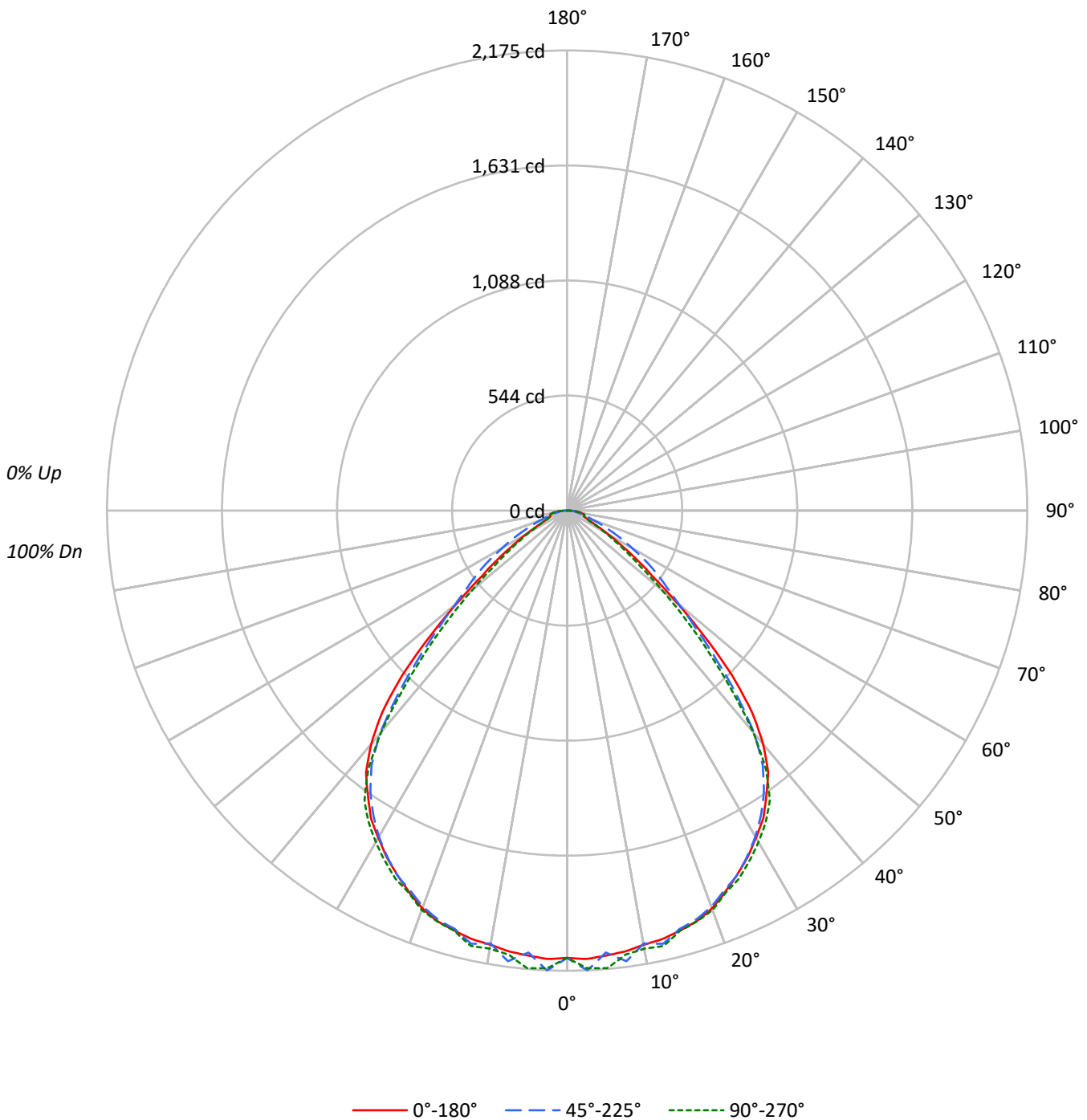
Input Watts (W): 33.48
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2845	2845	2845
5°	2851	2833	2933
10°	2847	2838	2873
15°	2863	2853	2865
20°	2865	2853	2877
25°	2821	2823	2850
30°	2774	2765	2810
35°	2696	2663	2743
40°	2532	2418	2405
45°	2098	1899	1801
50°	1411	1440	1230
55°	931	1208	807
60°	597	953	552
65°	385	728	374
70°	340	521	340
75°	439	414	443
80°	538	356	564
85°	625	530	658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.4	4.7
10°-20°	581.3	13.6
20°-30°	875.1	20.5
30°-40°	1014.3	23.7
40°-50°	792.4	18.5
50°-60°	423.1	9.9
60°-70°	217.6	5.1
70°-80°	123.1	2.9
80°-90°	46.8	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°	1658.9	38.8
0°-40°	2673.2	62.5
0°-60°	3888.6	90.9
0°-90°	4276.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4276.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2111	2170	2097	2155	2171	201
15°	2055	2068	2048	2062	2057	581
25°	1900	1894	1902	1899	1920	876
35°	1641	1634	1621	1654	1670	1023
45°	1103	1104	998	989	946	831
55°	397	502	515	464	344	366
65°	121	252	229	251	117	133
75°	84	159	80	148	85	86
85°	40	53	34	53	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2114.4	2114.4	2114.4	2114.4	2114.4
2.5°	2121.2	2159.7	2174.8	2156.2	2164.5
5°	2110.9	2170.0	2097.2	2154.9	2171.4
7.5°	2101.3	2095.1	2148.0	2093.1	2116.4
10°	2083.5	2087.6	2077.3	2116.4	2102.7
12.5°	2075.2	2099.3	2097.2	2077.3	2107.5
15°	2055.3	2068.4	2048.4	2061.5	2056.7
17.5°	2035.4	2029.2	2027.1	2032.6	2037.4
20°	2001.1	1980.5	1992.8	1994.2	2009.3
22.5°	1951.6	1939.3	1942.0	1954.4	1955.7
25°	1900.1	1893.9	1901.5	1898.7	1920.0
27.5°	1846.5	1838.3	1843.1	1853.4	1866.5
30°	1785.4	1783.4	1779.9	1788.9	1808.8
32.5°	1725.0	1708.5	1705.8	1724.3	1747.0
35°	1641.2	1633.7	1621.3	1653.6	1670.1
37.5°	1561.6	1538.2	1518.3	1537.5	1544.4
40°	1441.4	1423.5	1376.8	1378.9	1369.3
42.5°	1293.7	1280.7	1191.4	1175.6	1148.9
45°	1102.8	1103.5	997.8	988.9	946.3
47.5°	881.0	920.2	828.2	817.9	754.7
50°	674.3	745.1	688.1	671.6	587.8
52.5°	506.1	609.8	591.9	556.2	440.9
55°	396.9	502.0	515.0	464.2	344.0
57.5°	298.7	413.4	434.7	392.8	265.8
60°	221.8	348.2	354.3	337.9	205.3
62.5°	164.8	296.0	287.7	289.8	152.4
65°	120.9	252.0	228.7	251.3	117.4
67.5°	98.9	218.4	177.9	217.7	95.5
70°	86.5	193.7	132.5	191.6	86.5
72.5°	83.8	177.9	105.1	170.3	84.5
75°	84.5	158.6	79.7	148.3	85.2
77.5°	77.6	130.5	60.4	126.4	81.0
80°	69.4	98.9	46.0	100.3	72.8
82.5°	59.1	72.1	37.1	74.2	61.1
85°	40.5	52.9	34.3	52.9	42.6
87.5°	19.2	31.6	21.3	30.2	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)