

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: P294131

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294131
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-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4449.0 lumens
Efficiency: N/A
Efficacy: 131.4 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

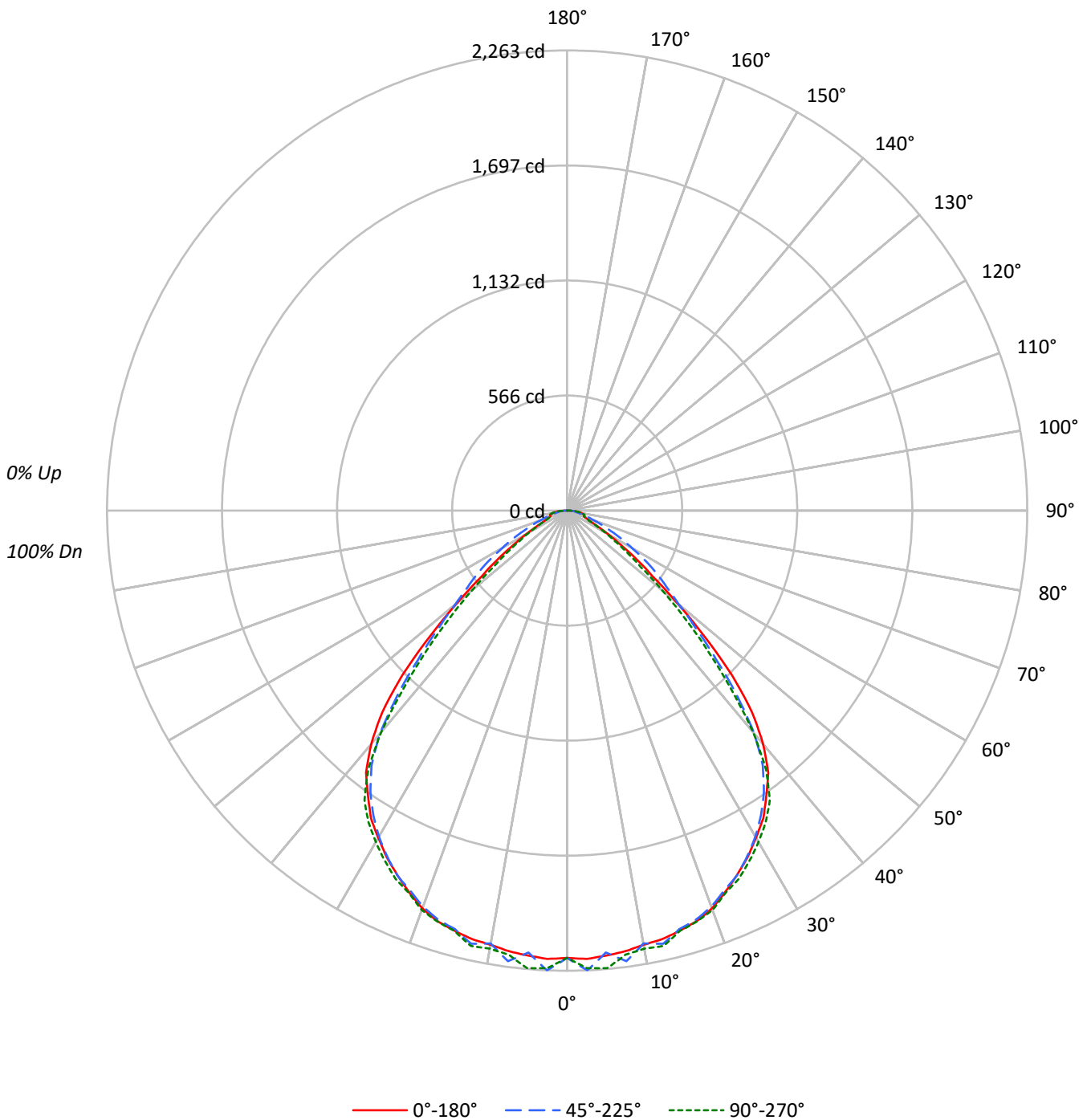
Input Watts (W): 33.852
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2960	2960	2960
5°	2966	2947	3051
10°	2962	2953	2989
15°	2979	2969	2981
20°	2981	2969	2993
25°	2935	2937	2966
30°	2886	2877	2924
35°	2805	2771	2854
40°	2634	2516	2502
45°	2183	1975	1874
50°	1469	1499	1280
55°	969	1257	840
60°	621	992	575
65°	400	757	389
70°	354	542	354
75°	457	431	461
80°	559	371	587
85°	651	551	684



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.6	4.7
10°-20°	604.8	13.6
20°-30°	910.5	20.5
30°-40°	1055.4	23.7
40°-50°	824.4	18.5
50°-60°	440.2	9.9
60°-70°	226.4	5.1
70°-80°	128.1	2.9
80°-90°	48.6	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°	1726.0	38.8
0°-40°	2781.3	62.5
0°-60°	4045.9	90.9
0°-90°	4449.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4449.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2200	2200	2200	2200	2200	
5°	2196	2258	2182	2242	2259	209
15°	2138	2152	2131	2145	2140	604
25°	1977	1971	1978	1976	1998	911
35°	1708	1700	1687	1720	1738	1065
45°	1148	1148	1038	1029	985	865
55°	413	522	536	483	358	381
65°	126	262	238	262	122	138
75°	88	165	83	154	89	89
85°	42	55	36	55	44	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2199.9	2199.9	2199.9	2199.9	2199.9
2.5°	2207.0	2247.1	2262.8	2243.5	2252.1
5°	2196.3	2257.8	2182.0	2242.1	2259.2
7.5°	2186.3	2179.9	2234.9	2177.8	2202.0
10°	2167.8	2172.0	2161.3	2202.0	2187.8
12.5°	2159.2	2184.2	2182.0	2161.3	2192.8
15°	2138.5	2152.0	2131.3	2144.9	2139.9
17.5°	2117.7	2111.3	2109.2	2114.9	2119.9
20°	2082.0	2060.6	2073.4	2074.9	2090.6
22.5°	2030.6	2017.7	2020.6	2033.4	2034.9
25°	1977.0	1970.6	1978.4	1975.6	1997.7
27.5°	1921.3	1912.7	1917.7	1928.4	1942.0
30°	1857.7	1855.5	1851.9	1861.2	1882.0
32.5°	1794.8	1777.6	1774.8	1794.1	1817.7
35°	1707.6	1699.8	1686.9	1720.5	1737.6
37.5°	1624.7	1600.4	1579.7	1599.7	1606.9
40°	1499.7	1481.1	1432.5	1434.7	1424.7
42.5°	1346.1	1332.5	1239.6	1223.2	1195.3
45°	1147.5	1148.2	1038.1	1028.9	984.6
47.5°	916.7	957.4	861.7	851.0	785.2
50°	701.6	775.2	715.9	698.8	611.6
52.5°	526.6	634.5	615.9	578.7	458.7
55°	413.0	522.3	535.9	483.0	358.0
57.5°	310.8	430.1	452.3	408.7	276.5
60°	230.8	362.2	368.7	351.5	213.6
62.5°	171.5	307.9	299.4	301.5	158.6
65°	125.7	262.2	237.9	261.5	122.2
67.5°	102.9	227.2	185.1	226.5	99.3
70°	90.0	201.5	137.9	199.3	90.0
72.5°	87.2	185.1	109.3	177.2	87.9
75°	87.9	165.0	82.9	154.3	88.6
77.5°	80.7	135.8	62.9	131.5	84.3
80°	72.2	102.9	47.9	104.3	75.7
82.5°	61.4	75.0	38.6	77.2	63.6
85°	42.2	55.0	35.7	55.0	44.3
87.5°	20.0	32.9	22.1	31.4	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)