

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: P293938

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293938
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-L83050-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: 4719.0 lumens
Efficiency: N/A
Efficacy: 143.7 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

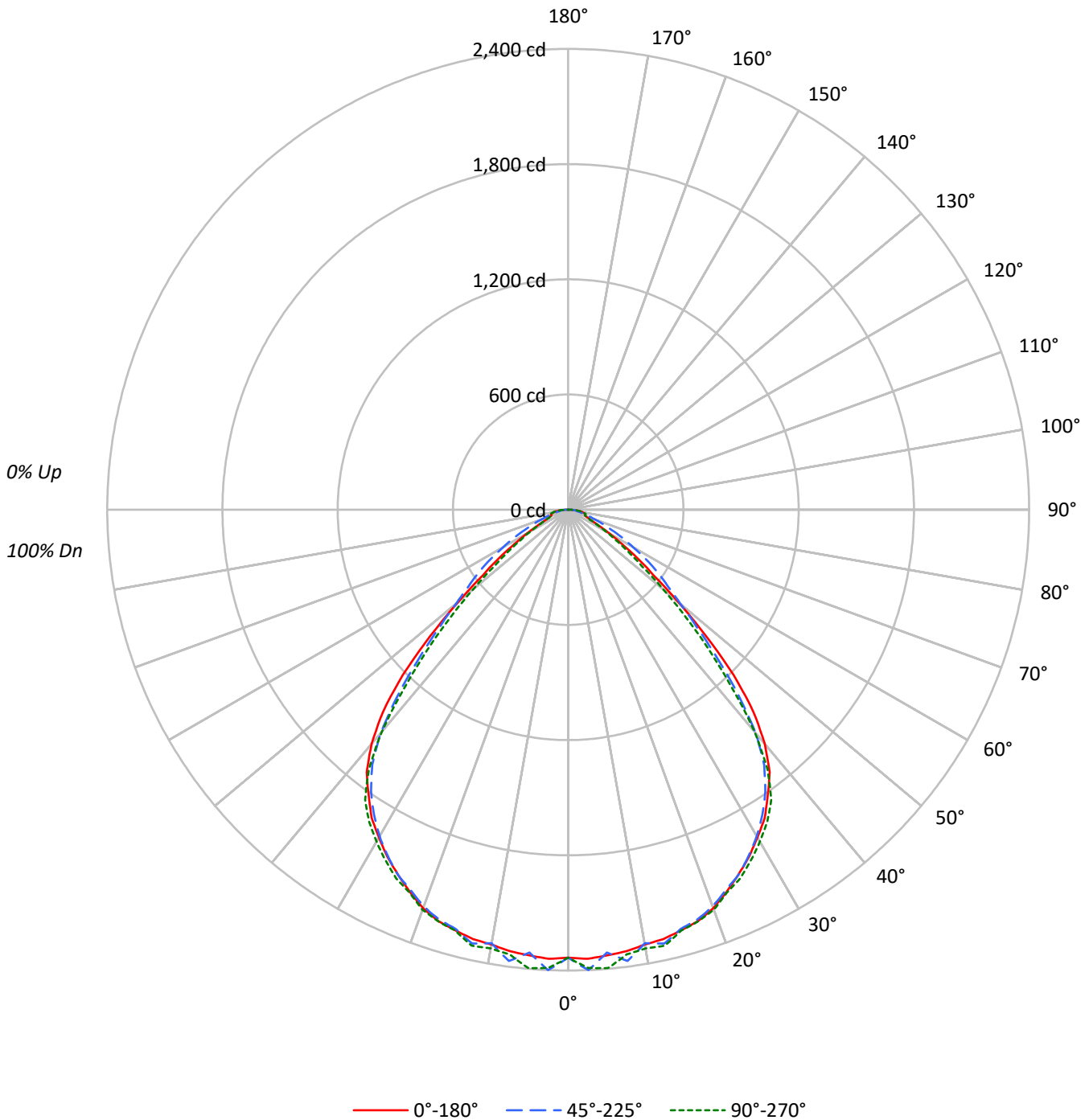
Input Watts (W): 32.829
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	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°	3140	3140	3140
5°	3146	3126	3237
10°	3141	3132	3170
15°	3159	3149	3162
20°	3162	3149	3175
25°	3113	3115	3146
30°	3061	3052	3101
35°	2975	2939	3027
40°	2794	2669	2654
45°	2316	2095	1987
50°	1558	1590	1358
55°	1027	1333	891
60°	659	1052	610
65°	425	804	413
70°	376	576	376
75°	485	457	489
80°	593	394	622
85°	690	585	726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.4	4.7
10°-20°	641.5	13.6
20°-30°	965.8	20.5
30°-40°	1119.4	23.7
40°-50°	874.5	18.5
50°-60°	466.9	9.9
60°-70°	240.1	5.1
70°-80°	135.8	2.9
80°-90°	51.6	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°	1830.7	38.8
0°-40°	2950.1	62.5
0°-60°	4291.5	90.9
0°-90°	4719.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4719.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2333	2333	2333	2333	2333	
5°	2330	2395	2314	2378	2396	222
15°	2268	2283	2261	2275	2270	641
25°	2097	2090	2098	2095	2119	966
35°	1811	1803	1789	1825	1843	1129
45°	1217	1218	1101	1091	1044	917
55°	438	554	568	512	380	404
65°	133	278	252	277	130	147
75°	93	175	88	164	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°	2333.4	2333.4	2333.4	2333.4	2333.4
2.5°	2341.0	2383.4	2400.1	2379.6	2388.7
5°	2329.6	2394.8	2314.5	2378.1	2396.3
7.5°	2319.0	2312.2	2370.5	2309.9	2335.7
10°	2299.3	2303.9	2292.5	2335.7	2320.5
12.5°	2290.2	2316.7	2314.5	2292.5	2325.8
15°	2268.2	2282.6	2260.7	2275.1	2269.8
17.5°	2246.3	2239.4	2237.2	2243.2	2248.5
20°	2208.4	2185.6	2199.3	2200.8	2217.5
22.5°	2153.8	2140.2	2143.2	2156.8	2158.3
25°	2097.0	2090.1	2098.5	2095.4	2118.9
27.5°	2037.8	2028.8	2034.1	2045.4	2059.8
30°	1970.4	1968.1	1964.3	1974.2	1996.2
32.5°	1903.7	1885.5	1882.5	1903.0	1928.0
35°	1811.3	1802.9	1789.3	1824.9	1843.1
37.5°	1723.3	1697.6	1675.6	1696.8	1704.4
40°	1590.7	1571.0	1519.5	1521.8	1511.1
42.5°	1427.8	1413.4	1314.9	1297.4	1267.9
45°	1217.1	1217.9	1101.2	1091.3	1044.3
47.5°	972.3	1015.5	914.0	902.6	832.9
50°	744.2	822.3	759.4	741.2	648.7
52.5°	558.5	673.0	653.3	613.9	486.5
55°	438.0	554.0	568.4	512.3	379.7
57.5°	329.7	456.2	479.7	433.5	293.3
60°	244.8	384.2	391.0	372.9	226.6
62.5°	181.9	326.6	317.5	319.8	168.2
65°	133.4	278.1	252.4	277.4	129.6
67.5°	109.1	241.0	196.3	240.2	105.3
70°	95.5	213.7	146.3	211.4	95.5
72.5°	92.5	196.3	116.0	187.9	93.2
75°	93.2	175.1	87.9	163.7	94.0
77.5°	85.6	144.0	66.7	139.4	89.4
80°	76.5	109.1	50.8	110.6	80.3
82.5°	65.2	79.6	40.9	81.8	67.4
85°	44.7	58.4	37.9	58.4	47.0
87.5°	21.2	34.9	23.5	33.3	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)