

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: P294136

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294136
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-LD5-56-A19/156-UNV-L92765-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4844.0 lumens
Efficiency: N/A
Efficacy: 122.8 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

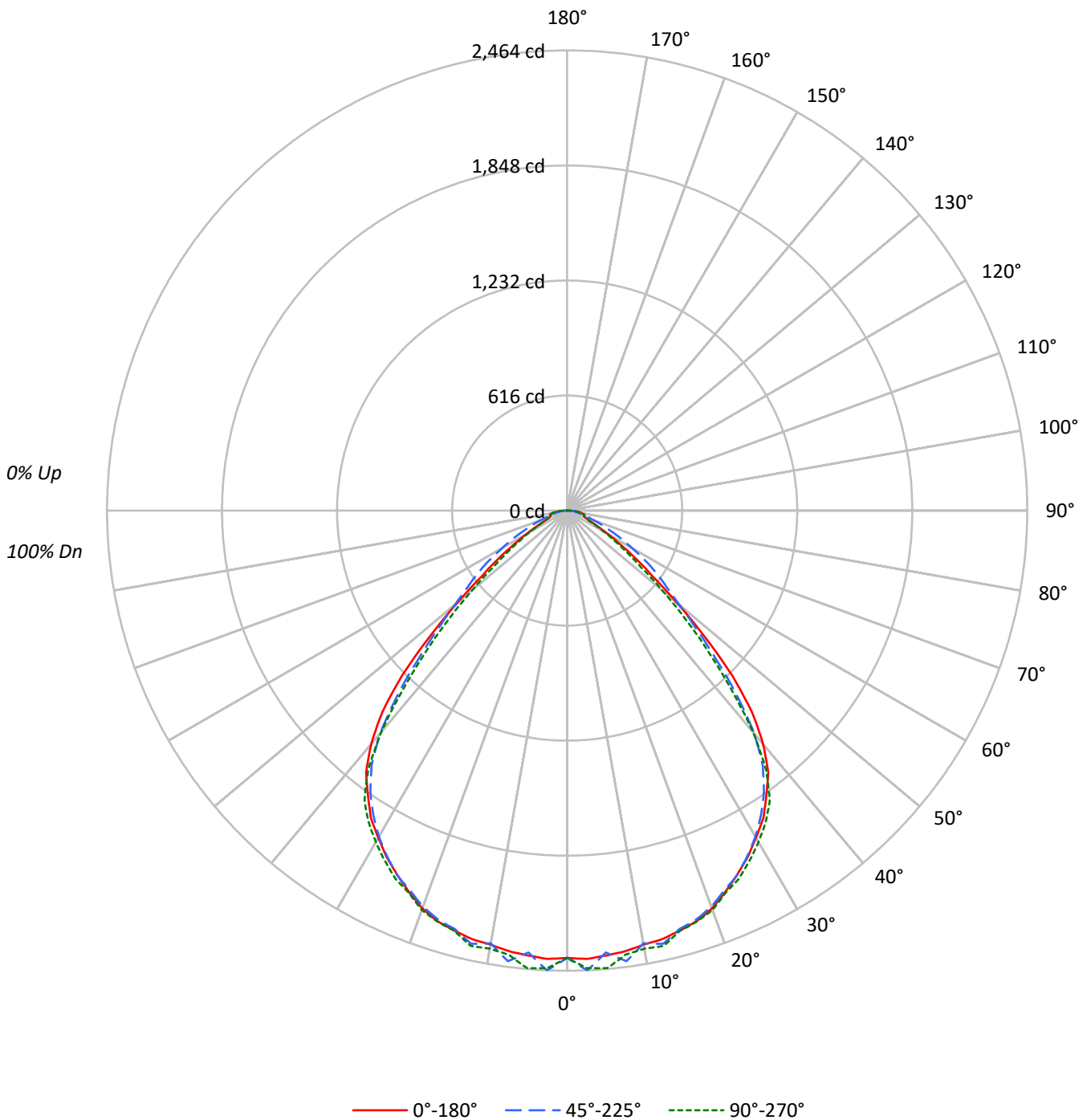
Input Watts (W): 39.432
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3223	3223	3223
5°	3230	3209	3322
10°	3225	3215	3254
15°	3243	3232	3245
20°	3246	3232	3259
25°	3196	3198	3229
30°	3142	3133	3183
35°	3054	3017	3108
40°	2868	2739	2725
45°	2377	2151	2040
50°	1599	1632	1394
55°	1055	1369	914
60°	676	1080	626
65°	436	825	423
70°	386	590	386
75°	498	469	502
80°	609	404	639
85°	709	601	744



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.3	4.7
10°-20°	658.5	13.6
20°-30°	991.4	20.5
30°-40°	1149.1	23.7
40°-50°	897.6	18.5
50°-60°	479.3	9.9
60°-70°	246.5	5.1
70°-80°	139.4	2.9
80°-90°	52.9	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°	1879.2	38.8
0°-40°	3028.3	62.5
0°-60°	4405.2	90.9
0°-90°	4844.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2395	2395	2395	2395	2395	
5°	2391	2458	2376	2441	2460	227
15°	2328	2343	2320	2335	2330	658
25°	2152	2146	2154	2151	2175	992
35°	1859	1851	1837	1873	1892	1159
45°	1249	1250	1130	1120	1072	941
55°	450	569	583	526	390	415
65°	137	286	259	285	133	150
75°	96	180	90	168	96	97
85°	46	60	39	60	48	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2395.2	2395.2	2395.2	2395.2	2395.2
2.5°	2403.0	2446.6	2463.7	2442.7	2452.0
5°	2391.3	2458.2	2375.8	2441.1	2459.8
7.5°	2380.4	2373.4	2433.3	2371.1	2397.6
10°	2360.2	2364.9	2353.2	2397.6	2382.0
12.5°	2350.9	2378.1	2375.8	2353.2	2387.4
15°	2328.3	2343.1	2320.5	2335.3	2329.9
17.5°	2305.8	2298.8	2296.4	2302.6	2308.1
20°	2266.9	2243.5	2257.5	2259.1	2276.2
22.5°	2210.9	2196.8	2200.0	2214.0	2215.5
25°	2152.5	2145.5	2154.1	2151.0	2175.1
27.5°	2091.8	2082.5	2087.9	2099.6	2114.4
30°	2022.6	2020.3	2016.4	2026.5	2049.0
32.5°	1954.1	1935.5	1932.4	1953.4	1979.0
35°	1859.2	1850.7	1836.7	1873.2	1891.9
37.5°	1769.0	1742.5	1720.0	1741.8	1749.5
40°	1632.9	1612.6	1559.7	1562.1	1551.2
42.5°	1465.6	1450.8	1349.7	1331.8	1301.5
45°	1249.3	1250.1	1130.3	1120.2	1072.0
47.5°	998.1	1042.4	938.2	926.5	854.9
50°	763.9	844.0	779.5	760.8	665.9
52.5°	573.3	690.8	670.6	630.1	499.4
55°	449.6	568.7	583.4	525.9	389.7
57.5°	338.4	468.3	492.4	445.0	301.1
60°	251.3	394.4	401.4	382.7	232.6
62.5°	186.7	335.3	325.9	328.3	172.7
65°	136.9	285.5	259.0	284.7	133.0
67.5°	112.0	247.4	201.5	246.6	108.1
70°	98.0	219.4	150.1	217.0	98.0
72.5°	94.9	201.5	119.0	192.9	95.7
75°	95.7	179.7	90.2	168.0	96.5
77.5°	87.9	147.8	68.5	143.1	91.8
80°	78.6	112.0	52.1	113.6	82.5
82.5°	66.9	81.7	42.0	84.0	69.2
85°	45.9	59.9	38.9	59.9	48.2
87.5°	21.8	35.8	24.1	34.2	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)