

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: P294137

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294137
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-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: 4969.0 lumens
Efficiency: N/A
Efficacy: 125.1 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

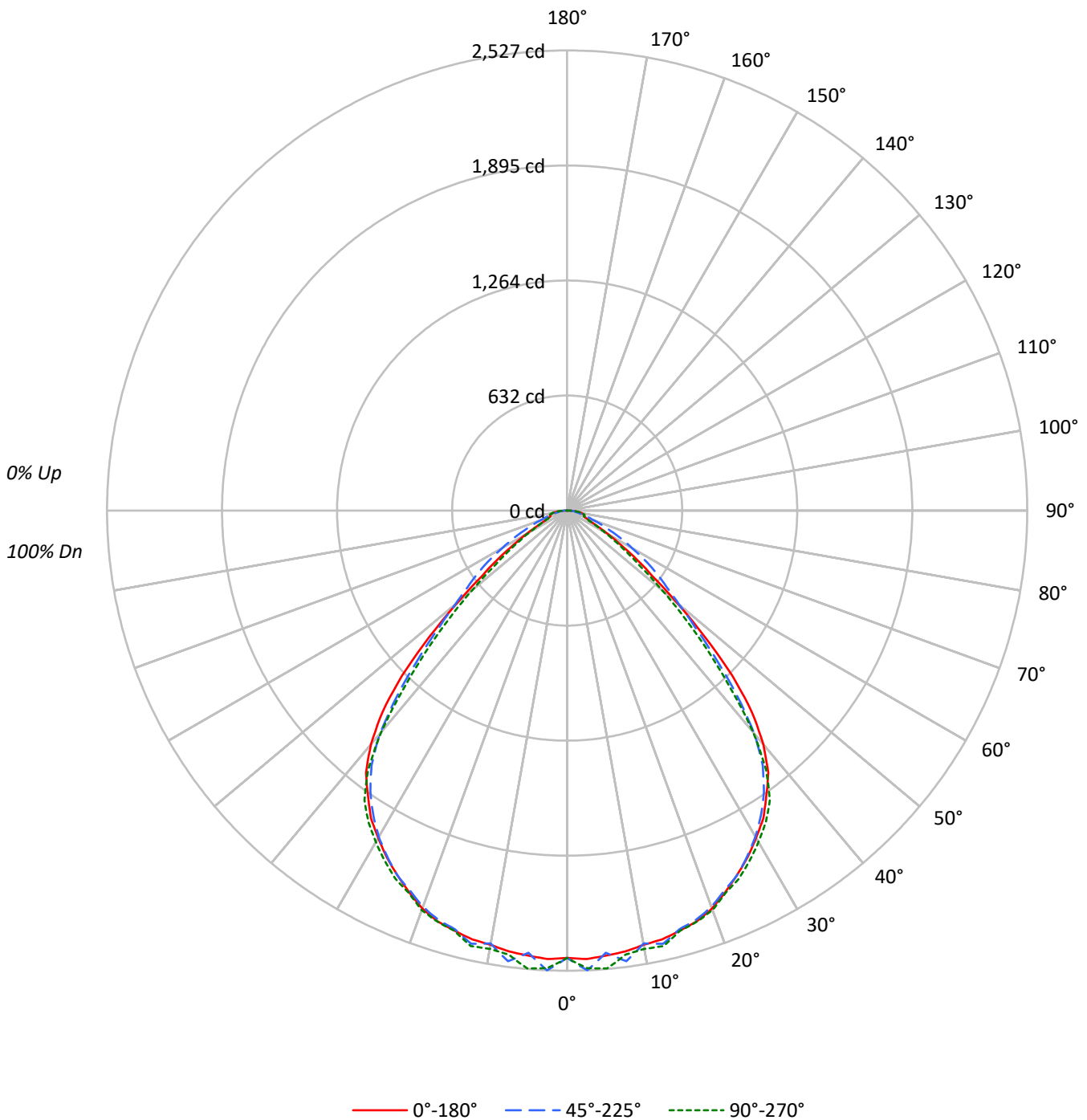
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3306	3306	3306
5°	3313	3292	3408
10°	3308	3298	3338
15°	3327	3316	3329
20°	3330	3316	3343
25°	3278	3280	3312
30°	3223	3214	3266
35°	3133	3095	3188
40°	2942	2810	2795
45°	2439	2206	2092
50°	1640	1674	1430
55°	1082	1404	938
60°	694	1108	642
65°	447	846	435
70°	395	606	395
75°	510	481	515
80°	625	415	656
85°	727	616	764



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.3	4.7
10°-20°	675.5	13.6
20°-30°	1017.0	20.5
30°-40°	1178.7	23.7
40°-50°	920.8	18.5
50°-60°	491.7	9.9
60°-70°	252.8	5.1
70°-80°	143.0	2.9
80°-90°	54.3	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°	1927.7	38.8
0°-40°	3106.4	62.5
0°-60°	4518.8	90.9
0°-90°	4969.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4969.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2457	2457	2457	2457	2457	
5°	2453	2522	2437	2504	2523	233
15°	2388	2404	2380	2396	2390	675
25°	2208	2201	2210	2206	2231	1017
35°	1907	1898	1884	1922	1941	1189
45°	1282	1282	1160	1149	1100	966
55°	461	583	598	539	400	426
65°	140	293	266	292	136	154
75°	98	184	93	172	99	99
85°	47	61	40	61	50	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2457.0	2457.0	2457.0	2457.0	2457.0
2.5°	2465.0	2509.7	2527.3	2505.7	2515.3
5°	2453.0	2521.7	2437.1	2504.1	2523.3
7.5°	2441.9	2434.7	2496.1	2432.3	2459.4
10°	2421.1	2425.9	2413.9	2459.4	2443.5
12.5°	2411.5	2439.5	2437.1	2413.9	2449.0
15°	2388.4	2403.6	2380.4	2395.6	2390.0
17.5°	2365.3	2358.1	2355.7	2362.1	2367.7
20°	2325.4	2301.4	2315.8	2317.4	2334.9
22.5°	2267.9	2253.5	2256.7	2271.1	2272.7
25°	2208.1	2200.9	2209.6	2206.5	2231.2
27.5°	2145.8	2136.2	2141.8	2153.8	2169.0
30°	2074.8	2072.4	2068.4	2078.8	2101.9
32.5°	2004.6	1985.4	1982.2	2003.8	2030.1
35°	1907.2	1898.4	1884.1	1921.6	1940.7
37.5°	1814.6	1787.5	1764.4	1786.7	1794.7
40°	1675.0	1654.2	1600.0	1602.4	1591.2
42.5°	1503.4	1488.3	1384.5	1366.2	1335.0
45°	1281.6	1282.4	1159.5	1149.1	1099.6
47.5°	1023.8	1069.3	962.4	950.4	877.0
50°	783.6	865.8	799.6	780.4	683.1
52.5°	588.1	708.6	687.9	646.4	512.3
55°	461.2	583.3	598.5	539.4	399.8
57.5°	347.1	480.4	505.1	456.5	308.8
60°	257.8	404.6	411.8	392.6	238.6
62.5°	191.5	343.9	334.4	336.8	177.2
65°	140.4	292.9	265.7	292.1	136.5
67.5°	114.9	253.8	206.7	253.0	110.9
70°	100.5	225.0	154.0	222.6	100.5
72.5°	97.4	206.7	122.1	197.9	98.2
75°	98.2	184.3	92.6	172.4	99.0
77.5°	90.2	151.6	70.2	146.8	94.2
80°	80.6	114.9	53.5	116.5	84.6
82.5°	68.6	83.8	43.1	86.2	71.0
85°	47.1	61.4	39.9	61.4	49.5
87.5°	22.3	36.7	24.7	35.1	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)