

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: P293980

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293980
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-LD5-38-A19/156-UNV-L82765-W2A1-U-2700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3437.0 lumens
Efficiency: N/A
Efficacy: 135.4 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

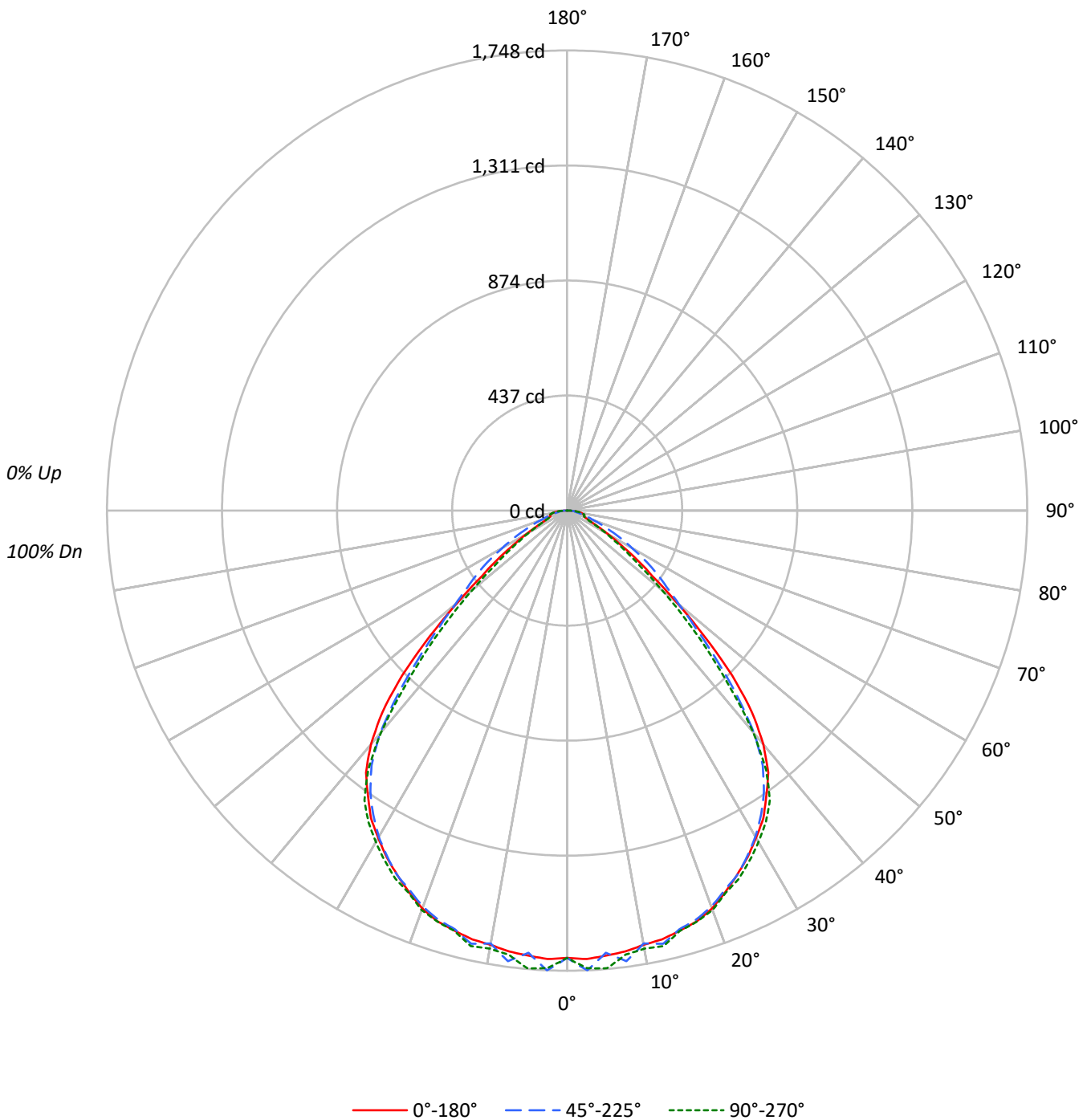
Input Watts (W): 25.389
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2287	2287	2287
5°	2292	2277	2357
10°	2288	2281	2309
15°	2301	2293	2303
20°	2303	2294	2312
25°	2267	2269	2291
30°	2230	2223	2259
35°	2167	2141	2205
40°	2035	1944	1933
45°	1687	1526	1447
50°	1135	1158	989
55°	748	971	649
60°	480	766	444
65°	309	585	301
70°	273	419	273
75°	353	333	356
80°	432	287	453
85°	503	426	528



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.7	4.7
10°-20°	467.2	13.6
20°-30°	703.4	20.5
30°-40°	815.3	23.7
40°-50°	636.9	18.5
50°-60°	340.1	9.9
60°-70°	174.9	5.1
70°-80°	98.9	2.9
80°-90°	37.6	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°	1333.4	38.8
0°-40°	2148.7	62.5
0°-60°	3125.6	90.9
0°-90°	3437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3437.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1697	1744	1686	1732	1745	161
15°	1652	1662	1646	1657	1653	467
25°	1527	1522	1528	1526	1543	704
35°	1319	1313	1303	1329	1342	822
45°	886	887	802	795	761	668
55°	319	404	414	373	276	294
65°	97	203	184	202	94	107
75°	68	128	64	119	68	69
85°	33	42	28	42	34	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1699.5	1699.5	1699.5	1699.5	1699.5
2.5°	1705.0	1735.9	1748.1	1733.2	1739.8
5°	1696.7	1744.2	1685.7	1732.1	1745.3
7.5°	1689.0	1684.0	1726.5	1682.4	1701.2
10°	1674.7	1678.0	1669.7	1701.2	1690.1
12.5°	1668.0	1687.4	1685.7	1669.7	1694.0
15°	1652.0	1662.5	1646.5	1657.0	1653.1
17.5°	1636.0	1631.1	1629.4	1633.8	1637.7
20°	1608.4	1591.9	1601.8	1602.9	1615.0
22.5°	1568.7	1558.7	1561.0	1570.9	1572.0
25°	1527.3	1522.3	1528.4	1526.2	1543.3
27.5°	1484.2	1477.6	1481.5	1489.8	1500.2
30°	1435.1	1433.5	1430.7	1437.9	1453.9
32.5°	1386.5	1373.3	1371.1	1386.0	1404.2
35°	1319.2	1313.1	1303.2	1329.1	1342.4
37.5°	1255.2	1236.4	1220.4	1235.8	1241.4
40°	1158.6	1144.2	1106.7	1108.3	1100.6
42.5°	1039.9	1029.4	957.7	945.0	923.4
45°	886.5	887.0	802.0	794.8	760.6
47.5°	708.2	739.6	665.7	657.4	606.6
50°	542.0	598.9	553.1	539.8	472.5
52.5°	406.8	490.1	475.8	447.1	354.4
55°	319.0	403.5	414.0	373.1	276.5
57.5°	240.1	332.3	349.4	315.7	213.6
60°	178.3	279.8	284.8	271.6	165.0
62.5°	132.5	237.9	231.3	232.9	122.5
65°	97.1	202.6	183.8	202.0	94.4
67.5°	79.5	175.5	143.0	175.0	76.7
70°	69.5	155.7	106.5	154.0	69.5
72.5°	67.3	143.0	84.5	136.9	67.9
75°	67.9	127.5	64.0	119.2	68.4
77.5°	62.4	104.9	48.6	101.6	65.1
80°	55.7	79.5	37.0	80.6	58.5
82.5°	47.5	58.0	29.8	59.6	49.1
85°	32.6	42.5	27.6	42.5	34.2
87.5°	15.5	25.4	17.1	24.3	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)