

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: P294112

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294112  
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-L92765-W2A1-U-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3515.0 lumens  
Efficiency: N/A  
Efficacy: 134.5 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

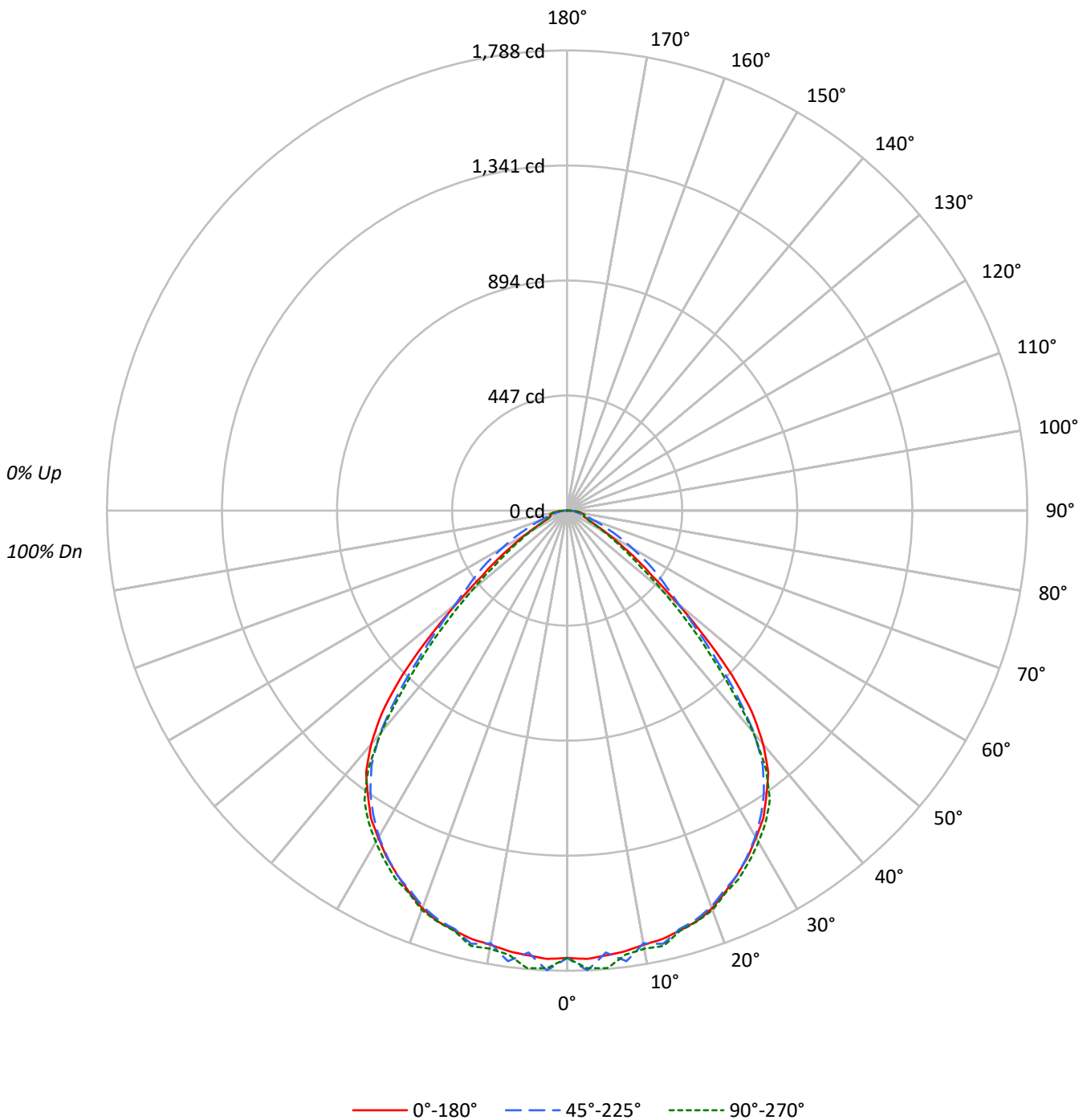
Input Watts (W): 26.133  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2339	2339	2339
5°	2344	2328	2411
10°	2340	2333	2362
15°	2353	2346	2355
20°	2355	2346	2365
25°	2319	2321	2343
30°	2280	2273	2310
35°	2216	2189	2255
40°	2081	1988	1977
45°	1725	1561	1480
50°	1160	1184	1011
55°	765	993	663
60°	491	784	454
65°	316	599	307
70°	280	428	280
75°	361	341	364
80°	442	293	463
85°	514	435	540



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.4	4.7
10°-20°	477.8	13.6
20°-30°	719.4	20.5
30°-40°	833.8	23.7
40°-50°	651.3	18.5
50°-60°	347.8	9.9
60°-70°	178.8	5.1
70°-80°	101.2	2.9
80°-90°	38.4	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°	1363.6	38.8
0°-40°	2197.4	62.5
0°-60°	3196.6	90.9
0°-90°	3515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3515.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1735	1784	1724	1771	1785	165
15°	1690	1700	1684	1695	1691	477
25°	1562	1557	1563	1561	1578	720
35°	1349	1343	1333	1359	1373	841
45°	907	907	820	813	778	683
55°	326	413	423	382	283	301
65°	99	207	188	207	96	109
75°	69	130	66	122	70	70
85°	33	44	28	44	35	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1738.1	1738.1	1738.1	1738.1	1738.1
2.5°	1743.7	1775.3	1787.7	1772.5	1779.3
5°	1735.2	1783.8	1724.0	1771.4	1784.9
7.5°	1727.3	1722.3	1765.7	1720.6	1739.8
10°	1712.7	1716.1	1707.6	1739.8	1728.5
12.5°	1705.9	1725.6	1724.0	1707.6	1732.4
15°	1689.5	1700.2	1683.9	1694.6	1690.6
17.5°	1673.2	1668.1	1666.4	1670.9	1674.8
20°	1644.9	1628.0	1638.2	1639.3	1651.7
22.5°	1604.3	1594.1	1596.4	1606.5	1607.7
25°	1561.9	1556.9	1563.1	1560.8	1578.3
27.5°	1517.9	1511.1	1515.1	1523.6	1534.3
30°	1467.7	1466.0	1463.2	1470.5	1486.9
32.5°	1418.0	1404.5	1402.2	1417.4	1436.1
35°	1349.1	1342.9	1332.8	1359.3	1372.8
37.5°	1283.7	1264.5	1248.1	1263.9	1269.5
40°	1184.9	1170.2	1131.8	1133.5	1125.6
42.5°	1063.5	1052.8	979.4	966.4	944.4
45°	906.6	907.1	820.2	812.9	777.9
47.5°	724.2	756.4	680.8	672.3	620.4
50°	554.3	612.5	565.6	552.1	483.2
52.5°	416.0	501.3	486.6	457.2	362.4
55°	326.3	412.6	423.4	381.6	282.8
57.5°	245.6	339.8	357.3	322.9	218.5
60°	182.3	286.2	291.3	277.7	168.8
62.5°	135.5	243.3	236.5	238.2	125.3
65°	99.4	207.2	188.0	206.6	96.5
67.5°	81.3	179.5	146.2	178.9	78.5
70°	71.1	159.2	108.9	157.5	71.1
72.5°	68.9	146.2	86.4	140.0	69.4
75°	69.4	130.4	65.5	121.9	70.0
77.5°	63.8	107.3	49.7	103.9	66.6
80°	57.0	81.3	37.8	82.4	59.8
82.5°	48.5	59.3	30.5	61.0	50.2
85°	33.3	43.5	28.2	43.5	35.0
87.5°	15.8	26.0	17.5	24.8	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)