

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: P294114

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294114  
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-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3554.0 lumens  
Efficiency: N/A  
Efficacy: 133.6 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

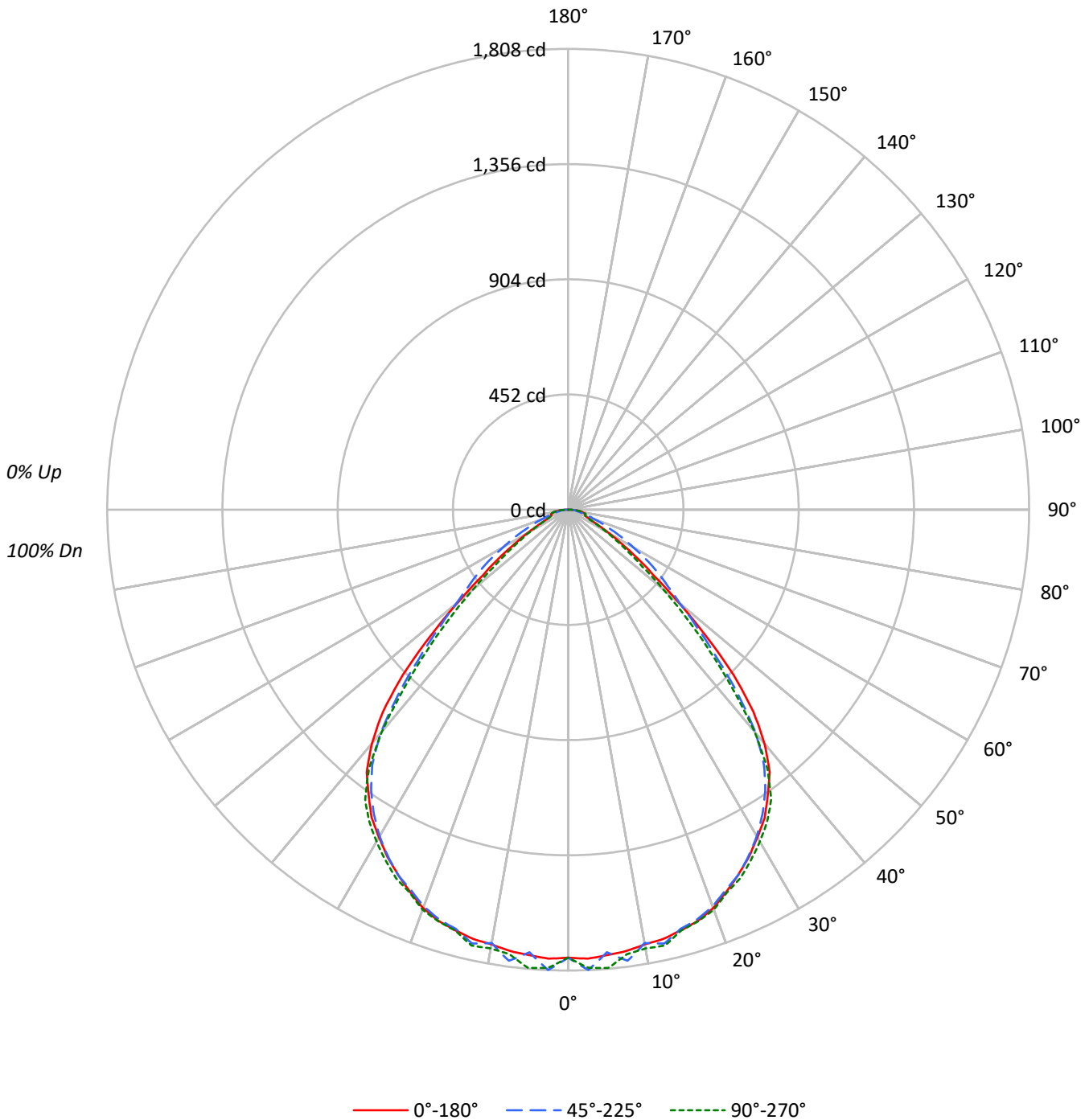
Input Watts (W): 26.598  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2365	2365	2365
5°	2370	2354	2437
10°	2366	2359	2388
15°	2380	2372	2381
20°	2381	2372	2391
25°	2345	2346	2369
30°	2306	2298	2336
35°	2241	2213	2280
40°	2104	2010	1999
45°	1744	1578	1497
50°	1173	1197	1023
55°	774	1004	671
60°	496	792	459
65°	320	605	311
70°	283	434	283
75°	365	344	368
80°	446	296	469
85°	520	440	546



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.3	4.7
10°-20°	483.1	13.6
20°-30°	727.4	20.5
30°-40°	843.1	23.7
40°-50°	658.6	18.5
50°-60°	351.7	9.9
60°-70°	180.8	5.1
70°-80°	102.3	2.9
80°-90°	38.8	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°	1378.8	38.8
0°-40°	2221.8	62.5
0°-60°	3232.0	90.9
0°-90°	3554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3554.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1757	1757	1757	1757	1757	
5°	1754	1804	1743	1791	1805	167
15°	1708	1719	1703	1713	1709	482
25°	1579	1574	1580	1578	1596	728
35°	1364	1358	1348	1374	1388	850
45°	917	917	829	822	786	691
55°	330	417	428	386	286	304
65°	100	210	190	209	98	110
75°	70	132	66	123	71	71
85°	34	44	28	44	35	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1757.4	1757.4	1757.4	1757.4	1757.4
2.5°	1763.1	1795.0	1807.6	1792.2	1799.0
5°	1754.5	1803.6	1743.1	1791.0	1804.7
7.5°	1746.5	1741.4	1785.3	1739.7	1759.1
10°	1731.7	1735.1	1726.5	1759.1	1747.6
12.5°	1724.8	1744.8	1743.1	1726.5	1751.6
15°	1708.3	1719.1	1702.6	1713.4	1709.4
17.5°	1691.7	1686.6	1684.9	1689.4	1693.4
20°	1663.2	1646.1	1656.3	1657.5	1670.0
22.5°	1622.1	1611.8	1614.1	1624.4	1625.5
25°	1579.3	1574.1	1580.4	1578.1	1595.8
27.5°	1534.8	1527.9	1531.9	1540.5	1551.3
30°	1484.0	1482.2	1479.4	1486.8	1503.4
32.5°	1433.7	1420.0	1417.8	1433.2	1452.0
35°	1364.1	1357.8	1347.5	1374.4	1388.1
37.5°	1297.9	1278.5	1261.9	1277.9	1283.6
40°	1198.0	1183.2	1144.4	1146.1	1138.1
42.5°	1075.3	1064.5	990.3	977.1	954.9
45°	916.6	917.2	829.3	821.9	786.5
47.5°	732.3	764.8	688.3	679.8	627.3
50°	560.5	619.3	571.9	558.2	488.6
52.5°	420.6	506.8	492.0	462.3	366.4
55°	329.9	417.2	428.1	385.8	285.9
57.5°	248.3	343.6	361.3	326.5	220.9
60°	184.4	289.4	294.5	280.8	170.7
62.5°	137.0	246.0	239.1	240.9	126.7
65°	100.5	209.5	190.1	208.9	97.6
67.5°	82.2	181.5	147.8	180.9	79.3
70°	71.9	161.0	110.2	159.2	71.9
72.5°	69.6	147.8	87.3	141.5	70.2
75°	70.2	131.8	66.2	123.3	70.8
77.5°	64.5	108.4	50.2	105.0	67.3
80°	57.6	82.2	38.2	83.3	60.5
82.5°	49.1	59.9	30.8	61.6	50.8
85°	33.7	43.9	28.5	43.9	35.4
87.5°	16.0	26.3	17.7	25.1	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)