

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: P293982

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293982
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3658.0 lumens
Efficiency: N/A
Efficacy: 143.6 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

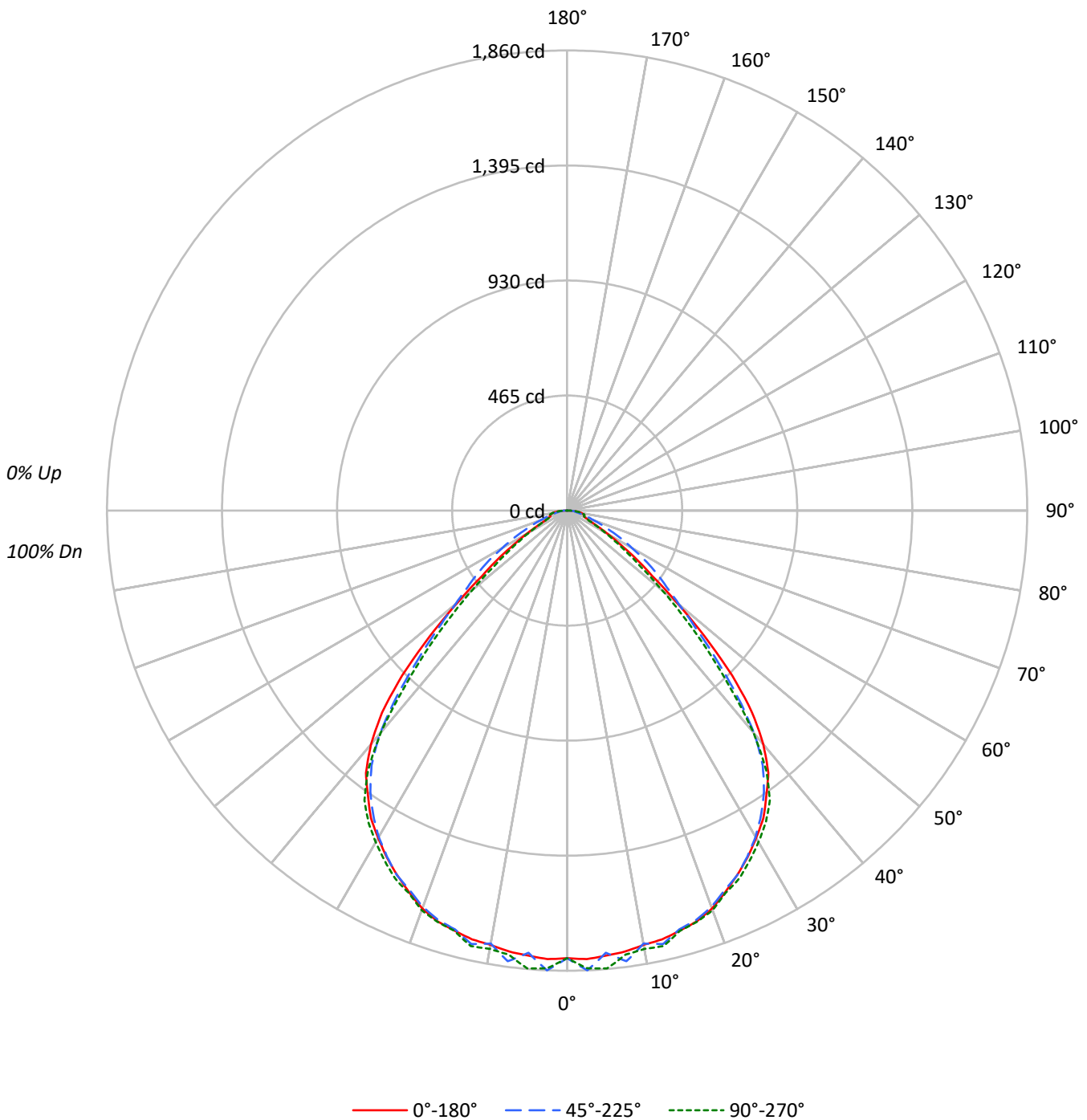
Input Watts (W): 25.482
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293982

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P293982

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3500K

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°	2434	2434	2434
5°	2439	2423	2509
10°	2435	2428	2458
15°	2449	2441	2451
20°	2451	2441	2461
25°	2413	2415	2438
30°	2373	2366	2404
35°	2306	2278	2347
40°	2166	2069	2057
45°	1795	1624	1540
50°	1208	1232	1053
55°	796	1034	690
60°	510	816	473
65°	329	623	320
70°	291	446	291
75°	376	354	378
80°	459	305	483
85°	536	454	562



TEST NUMBER: P293982

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	4.7
10°-20°	497.3	13.6
20°-30°	748.6	20.5
30°-40°	867.7	23.7
40°-50°	677.8	18.5
50°-60°	361.9	9.9
60°-70°	186.1	5.1
70°-80°	105.3	2.9
80°-90°	40.0	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°	1419.1	38.8
0°-40°	2286.8	62.5
0°-60°	3326.6	90.9
0°-90°	3658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3658.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1806	1856	1794	1843	1858	172
15°	1758	1769	1752	1764	1759	497
25°	1626	1620	1627	1624	1642	749
35°	1404	1398	1387	1415	1429	875
45°	944	944	854	846	810	711
55°	340	429	441	397	294	313
65°	103	216	196	215	100	114
75°	72	136	68	127	73	73
85°	35	45	29	45	36	36
90°	0	0	0	0	0	



TEST NUMBER: P293982

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1808.8	1808.8	1808.8	1808.8	1808.8
2.5°	1814.7	1847.5	1860.5	1844.6	1851.7
5°	1805.8	1856.4	1794.1	1843.4	1857.5
7.5°	1797.6	1792.3	1837.6	1790.6	1810.5
10°	1782.3	1785.9	1777.1	1810.5	1798.8
12.5°	1775.3	1795.9	1794.1	1777.1	1802.9
15°	1758.3	1769.4	1752.4	1763.5	1759.4
17.5°	1741.2	1735.9	1734.2	1738.9	1743.0
20°	1711.8	1694.2	1704.8	1706.0	1718.9
22.5°	1669.5	1659.0	1661.3	1671.9	1673.1
25°	1625.5	1620.2	1626.7	1624.3	1642.5
27.5°	1579.7	1572.6	1576.7	1585.5	1596.7
30°	1527.4	1525.6	1522.7	1530.3	1547.4
32.5°	1475.7	1461.6	1459.2	1475.1	1494.5
35°	1404.0	1397.6	1387.0	1414.6	1428.7
37.5°	1335.9	1315.9	1298.9	1315.3	1321.2
40°	1233.1	1217.8	1177.8	1179.6	1171.4
42.5°	1106.8	1095.6	1019.2	1005.7	982.8
45°	943.5	944.0	853.6	845.9	809.5
47.5°	753.7	787.2	708.5	699.7	645.6
50°	576.9	637.4	588.6	574.5	502.9
52.5°	433.0	521.7	506.4	475.8	377.1
55°	339.5	429.4	440.6	397.1	294.3
57.5°	255.5	353.6	371.9	336.0	227.3
60°	189.7	297.8	303.1	289.0	175.6
62.5°	141.0	253.2	246.1	247.9	130.4
65°	103.4	215.6	195.6	215.0	100.5
67.5°	84.6	186.8	152.2	186.2	81.7
70°	74.0	165.7	113.4	163.9	74.0
72.5°	71.7	152.2	89.9	145.7	72.3
75°	72.3	135.7	68.1	126.9	72.8
77.5°	66.4	111.6	51.7	108.1	69.3
80°	59.3	84.6	39.4	85.8	62.3
82.5°	50.5	61.7	31.7	63.4	52.3
85°	34.7	45.2	29.4	45.2	36.4
87.5°	16.4	27.0	18.2	25.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)