

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: P293981

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293981
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-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3536.0 lumens
Efficiency: N/A
Efficacy: 140.3 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

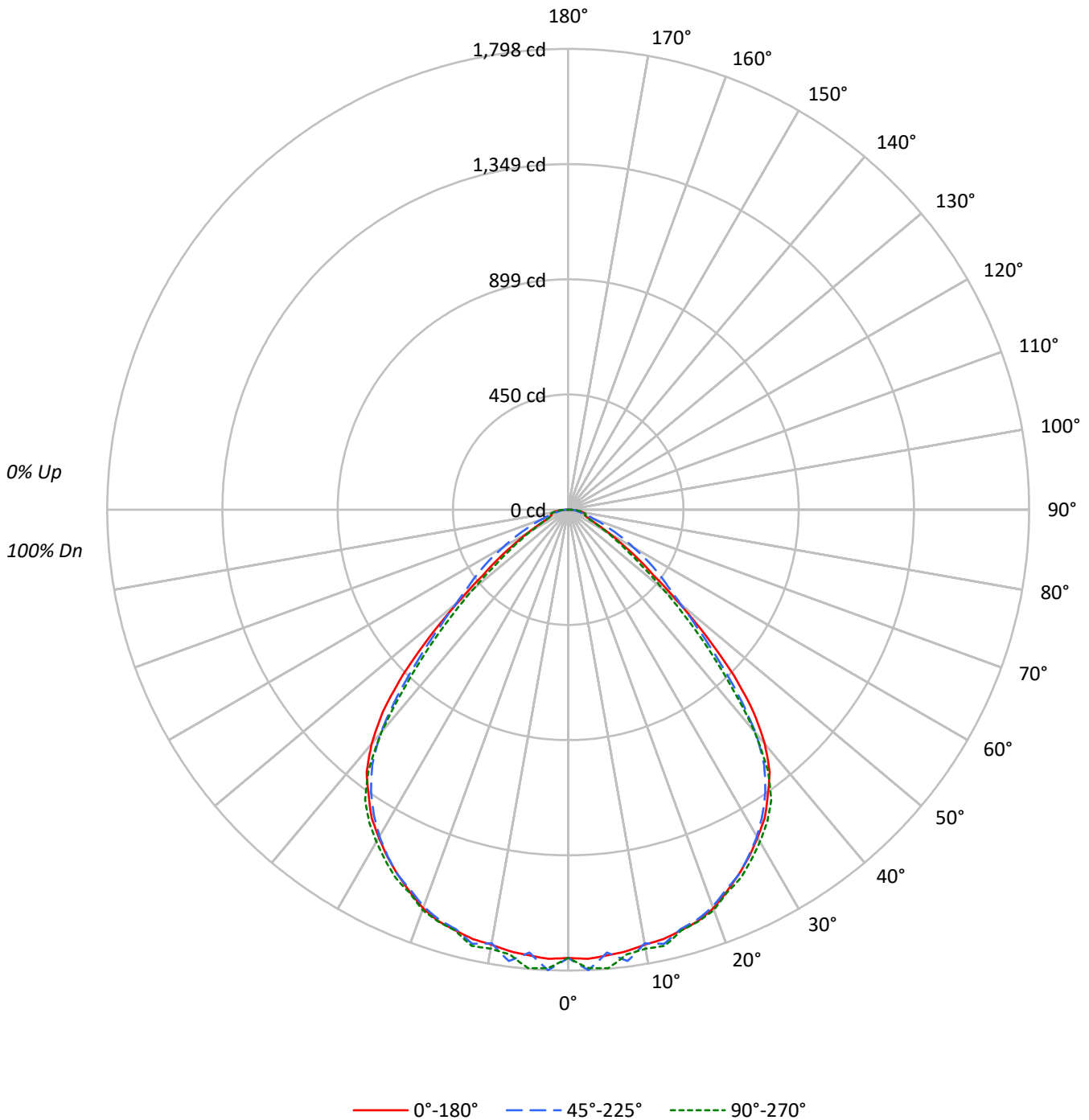
Input Watts (W): 25.203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293981

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P293981

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3000K

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°	2353	2353	2353
5°	2358	2342	2425
10°	2354	2347	2376
15°	2367	2360	2369
20°	2369	2360	2379
25°	2333	2334	2357
30°	2294	2287	2324
35°	2229	2202	2268
40°	2093	2000	1989
45°	1735	1570	1489
50°	1167	1191	1018
55°	770	999	667
60°	494	788	457
65°	318	602	309
70°	282	431	282
75°	363	343	366
80°	445	294	466
85°	517	438	543



TEST NUMBER: P293981

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.4	4.7
10°-20°	480.7	13.6
20°-30°	723.7	20.5
30°-40°	838.8	23.7
40°-50°	655.2	18.5
50°-60°	349.9	9.9
60°-70°	179.9	5.1
70°-80°	101.8	2.9
80°-90°	38.6	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°	1371.8	38.8
0°-40°	2210.5	62.5
0°-60°	3215.7	90.9
0°-90°	3536.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3536.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1748	1748	1748	1748	1748	
5°	1746	1794	1734	1782	1796	166
15°	1700	1710	1694	1705	1701	480
25°	1571	1566	1572	1570	1588	724
35°	1357	1351	1341	1367	1381	846
45°	912	913	825	818	782	687
55°	328	415	426	384	284	303
65°	100	208	189	208	97	110
75°	70	131	66	123	70	71
85°	34	44	28	44	35	35
90°	0	0	0	0	0	



TEST NUMBER: P293981

CATALOG NUMBER: 24GR-LD5-38-A19/156-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1748.5	1748.5	1748.5	1748.5	1748.5
2.5°	1754.1	1785.9	1798.4	1783.1	1789.9
5°	1745.6	1794.4	1734.3	1782.0	1795.6
7.5°	1737.7	1732.6	1776.3	1730.8	1750.2
10°	1722.9	1726.3	1717.8	1750.2	1738.8
12.5°	1716.1	1736.0	1734.3	1717.8	1742.8
15°	1699.6	1710.4	1693.9	1704.7	1700.8
17.5°	1683.1	1678.0	1676.3	1680.9	1684.8
20°	1654.8	1637.7	1647.9	1649.1	1661.6
22.5°	1613.9	1603.6	1605.9	1616.1	1617.3
25°	1571.3	1566.2	1572.4	1570.1	1587.7
27.5°	1527.0	1520.2	1524.1	1532.7	1543.5
30°	1476.4	1474.7	1471.9	1479.3	1495.8
32.5°	1426.5	1412.8	1410.6	1425.9	1444.6
35°	1357.2	1350.9	1340.7	1367.4	1381.0
37.5°	1291.3	1272.0	1255.5	1271.4	1277.1
40°	1191.9	1177.2	1138.6	1140.3	1132.3
42.5°	1069.9	1059.1	985.2	972.2	950.0
45°	912.0	912.6	825.1	817.7	782.5
47.5°	728.6	760.9	684.8	676.3	624.1
50°	557.6	616.1	569.0	555.4	486.1
52.5°	418.5	504.3	489.5	460.0	364.6
55°	328.2	415.1	425.9	383.9	284.5
57.5°	247.0	341.9	359.5	324.8	219.8
60°	183.4	287.9	293.0	279.4	169.8
62.5°	136.3	244.7	237.9	239.6	126.1
65°	99.9	208.4	189.1	207.8	97.1
67.5°	81.8	180.6	147.1	180.0	78.9
70°	71.6	160.1	109.6	158.4	71.6
72.5°	69.3	147.1	86.9	140.8	69.8
75°	69.8	131.2	65.9	122.7	70.4
77.5°	64.2	107.9	50.0	104.5	67.0
80°	57.4	81.8	38.0	82.9	60.2
82.5°	48.8	59.6	30.7	61.3	50.5
85°	33.5	43.7	28.4	43.7	35.2
87.5°	15.9	26.1	17.6	25.0	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)