

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: P293977

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293977
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-LD5-34-A19/156-UNV-L82765-W2A1-U-5500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3533.0 lumens
Efficiency: N/A
Efficacy: 149.6 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

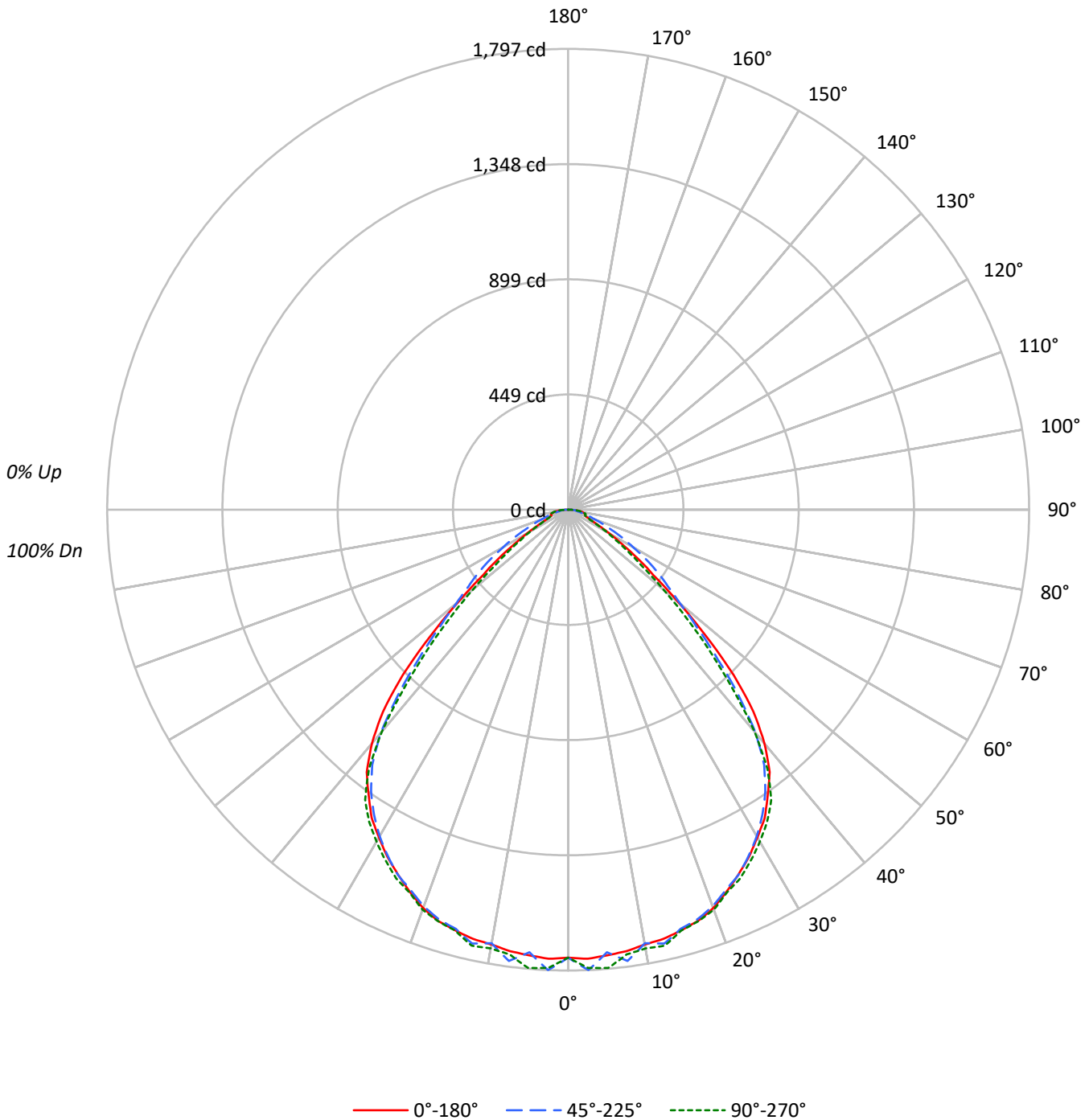
Input Watts (W): 23.622
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293977

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P293977

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-5500K

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2351	2351	2351
5°	2356	2340	2423
10°	2352	2345	2374
15°	2366	2358	2367
20°	2367	2358	2377
25°	2331	2332	2355
30°	2292	2285	2322
35°	2227	2200	2267
40°	2092	1998	1987
45°	1734	1569	1488
50°	1166	1190	1017
55°	769	998	667
60°	493	788	456
65°	318	601	309
70°	281	431	281
75°	363	342	366
80°	444	294	466
85°	517	438	543



TEST NUMBER: P293977

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.3	4.7
10°-20°	480.3	13.6
20°-30°	723.1	20.5
30°-40°	838.1	23.7
40°-50°	654.7	18.5
50°-60°	349.6	9.9
60°-70°	179.8	5.1
70°-80°	101.7	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°	1370.6	38.8
0°-40°	2208.7	62.5
0°-60°	3212.9	90.9
0°-90°	3533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3533.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1747	1747	1747	1747	1747	
5°	1744	1793	1733	1780	1794	166
15°	1698	1709	1692	1703	1699	480
25°	1570	1565	1571	1569	1586	723
35°	1356	1350	1340	1366	1380	845
45°	911	912	824	817	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: P293977

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1747.0	1747.0	1747.0	1747.0	1747.0
2.5°	1752.6	1784.4	1796.9	1781.6	1788.4
5°	1744.1	1792.9	1732.8	1780.4	1794.1
7.5°	1736.2	1731.1	1774.8	1729.4	1748.7
10°	1721.4	1724.8	1716.3	1748.7	1737.3
12.5°	1714.6	1734.5	1732.8	1716.3	1741.3
15°	1698.2	1709.0	1692.5	1703.3	1699.3
17.5°	1681.7	1676.6	1674.9	1679.4	1683.4
20°	1653.3	1636.3	1646.5	1647.7	1660.2
22.5°	1612.5	1602.3	1604.6	1614.8	1615.9
25°	1569.9	1564.8	1571.1	1568.8	1586.4
27.5°	1525.7	1518.9	1522.9	1531.4	1542.1
30°	1475.2	1473.5	1470.7	1478.0	1494.5
32.5°	1425.3	1411.6	1409.4	1424.7	1443.4
35°	1356.0	1349.8	1339.6	1366.3	1379.9
37.5°	1290.2	1270.9	1254.5	1270.4	1276.0
40°	1190.9	1176.2	1137.6	1139.3	1131.4
42.5°	1068.9	1058.2	984.4	971.4	949.2
45°	911.2	911.8	824.4	817.0	781.9
47.5°	728.0	760.3	684.3	675.8	623.6
50°	557.2	615.6	568.5	554.9	485.7
52.5°	418.2	503.8	489.1	459.6	364.3
55°	327.9	414.8	425.5	383.5	284.3
57.5°	246.8	341.6	359.2	324.5	219.6
60°	183.3	287.7	292.8	279.2	169.6
62.5°	136.2	244.5	237.7	239.4	126.0
65°	99.9	208.2	188.9	207.7	97.0
67.5°	81.7	180.4	147.0	179.9	78.9
70°	71.5	160.0	109.5	158.3	71.5
72.5°	69.2	147.0	86.8	140.7	69.8
75°	69.8	131.1	65.8	122.6	70.4
77.5°	64.1	107.8	49.9	104.4	67.0
80°	57.3	81.7	38.0	82.8	60.1
82.5°	48.8	59.6	30.6	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)