

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: P293975

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293975
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-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3452.0 lumens
Efficiency: N/A
Efficacy: 147.3 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

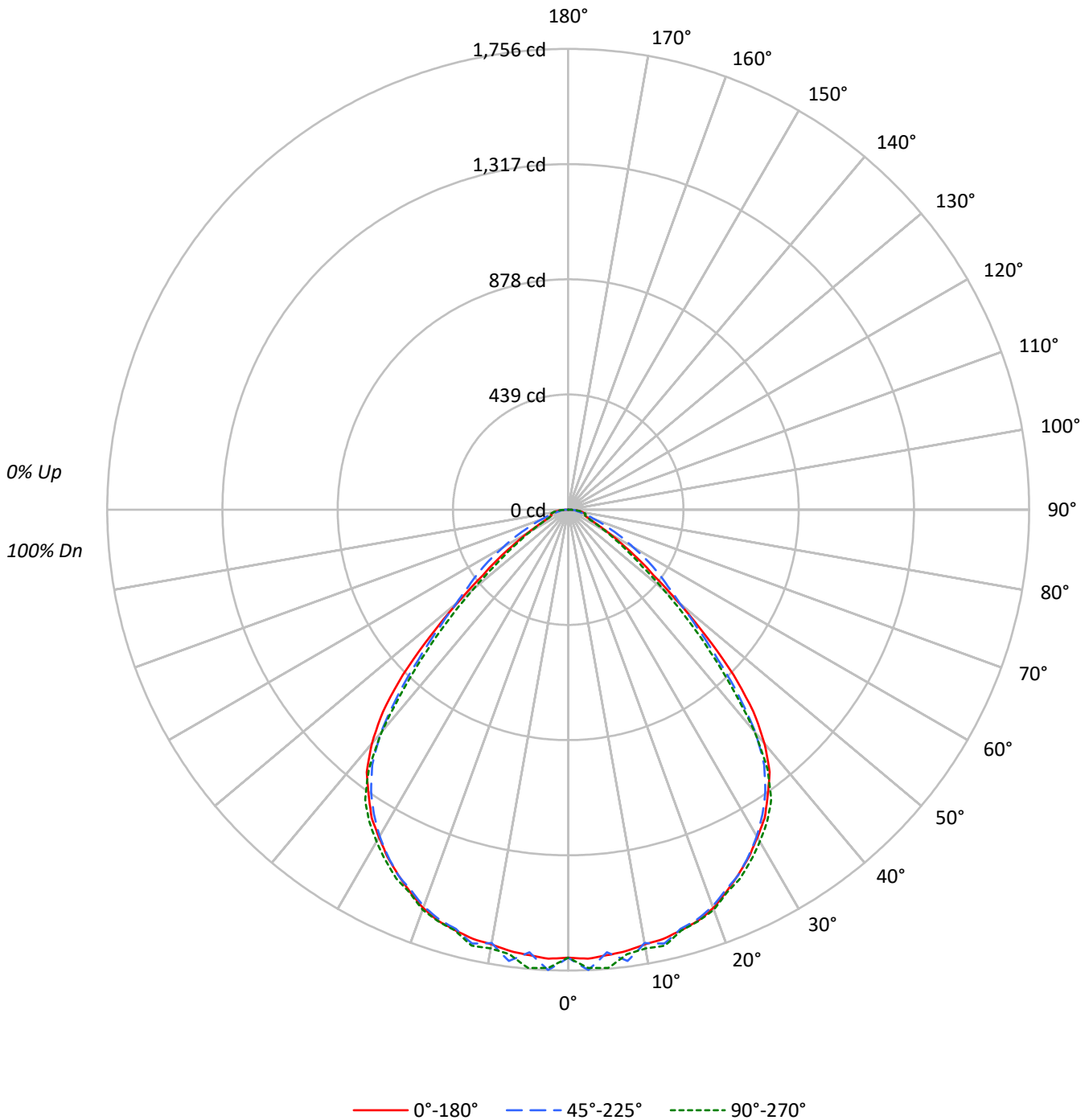
Input Watts (W): 23.436
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293975

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P293975

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-4500K

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°	2297	2297	2297
5°	2302	2287	2368
10°	2298	2291	2319
15°	2311	2304	2313
20°	2313	2304	2323
25°	2277	2279	2301
30°	2239	2232	2269
35°	2176	2150	2214
40°	2044	1952	1942
45°	1694	1533	1454
50°	1140	1163	993
55°	752	975	651
60°	482	770	446
65°	311	588	302
70°	275	421	275
75°	355	334	357
80°	434	287	456
85°	505	428	531



TEST NUMBER: P293975

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.4	4.7
10°-20°	469.3	13.6
20°-30°	706.5	20.5
30°-40°	818.9	23.7
40°-50°	639.7	18.5
50°-60°	341.6	9.9
60°-70°	175.6	5.1
70°-80°	99.4	2.9
80°-90°	37.7	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°	1339.2	38.8
0°-40°	2158.0	62.5
0°-60°	3139.3	90.9
0°-90°	3452.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3452.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1707	1707	1707	1707	1707	
5°	1704	1752	1693	1740	1753	162
15°	1659	1670	1654	1664	1660	469
25°	1534	1529	1535	1533	1550	707
35°	1325	1319	1309	1335	1348	826
45°	890	891	806	798	764	671
55°	320	405	416	375	278	296
65°	98	204	185	203	95	107
75°	68	128	64	120	69	69
85°	33	43	28	43	34	34
90°	0	0	0	0	0	



TEST NUMBER: P293975

CATALOG NUMBER: 24GR-LD5-34-A19/156-UNV-L82765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1706.9	1706.9	1706.9	1706.9	1706.9
2.5°	1712.5	1743.5	1755.7	1740.7	1747.4
5°	1704.1	1751.8	1693.1	1739.6	1752.9
7.5°	1696.4	1691.4	1734.1	1689.7	1708.6
10°	1682.0	1685.3	1677.0	1708.6	1697.5
12.5°	1675.3	1694.7	1693.1	1677.0	1701.4
15°	1659.2	1669.8	1653.7	1664.2	1660.3
17.5°	1643.2	1638.2	1636.5	1640.9	1644.8
20°	1615.4	1598.8	1608.8	1609.9	1622.1
22.5°	1575.5	1565.5	1567.8	1577.7	1578.9
25°	1534.0	1529.0	1535.1	1532.8	1550.0
27.5°	1490.7	1484.1	1487.9	1496.3	1506.8
30°	1441.4	1439.7	1436.9	1444.1	1460.2
32.5°	1392.6	1379.3	1377.1	1392.0	1410.3
35°	1325.0	1318.9	1308.9	1334.9	1348.2
37.5°	1260.6	1241.8	1225.7	1241.2	1246.8
40°	1163.6	1149.2	1111.5	1113.2	1105.4
42.5°	1044.4	1033.9	961.8	949.1	927.5
45°	890.3	890.9	805.5	798.3	763.9
47.5°	711.3	742.9	668.6	660.3	609.3
50°	544.4	601.5	555.5	542.2	474.5
52.5°	408.6	492.3	477.9	449.0	355.9
55°	320.4	405.2	415.8	374.8	277.7
57.5°	241.2	333.7	350.9	317.1	214.5
60°	179.1	281.1	286.1	272.8	165.8
62.5°	133.0	238.9	232.3	233.9	123.1
65°	97.6	203.5	184.6	202.9	94.8
67.5°	79.8	176.3	143.6	175.7	77.1
70°	69.9	156.3	107.0	154.7	69.9
72.5°	67.6	143.6	84.8	137.5	68.2
75°	68.2	128.1	64.3	119.7	68.7
77.5°	62.6	105.3	48.8	102.0	65.4
80°	56.0	79.8	37.1	80.9	58.8
82.5°	47.7	58.2	29.9	59.9	49.3
85°	32.7	42.7	27.7	42.7	34.4
87.5°	15.5	25.5	17.2	24.4	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)