

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: P292537

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-36-A19/156-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3367.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

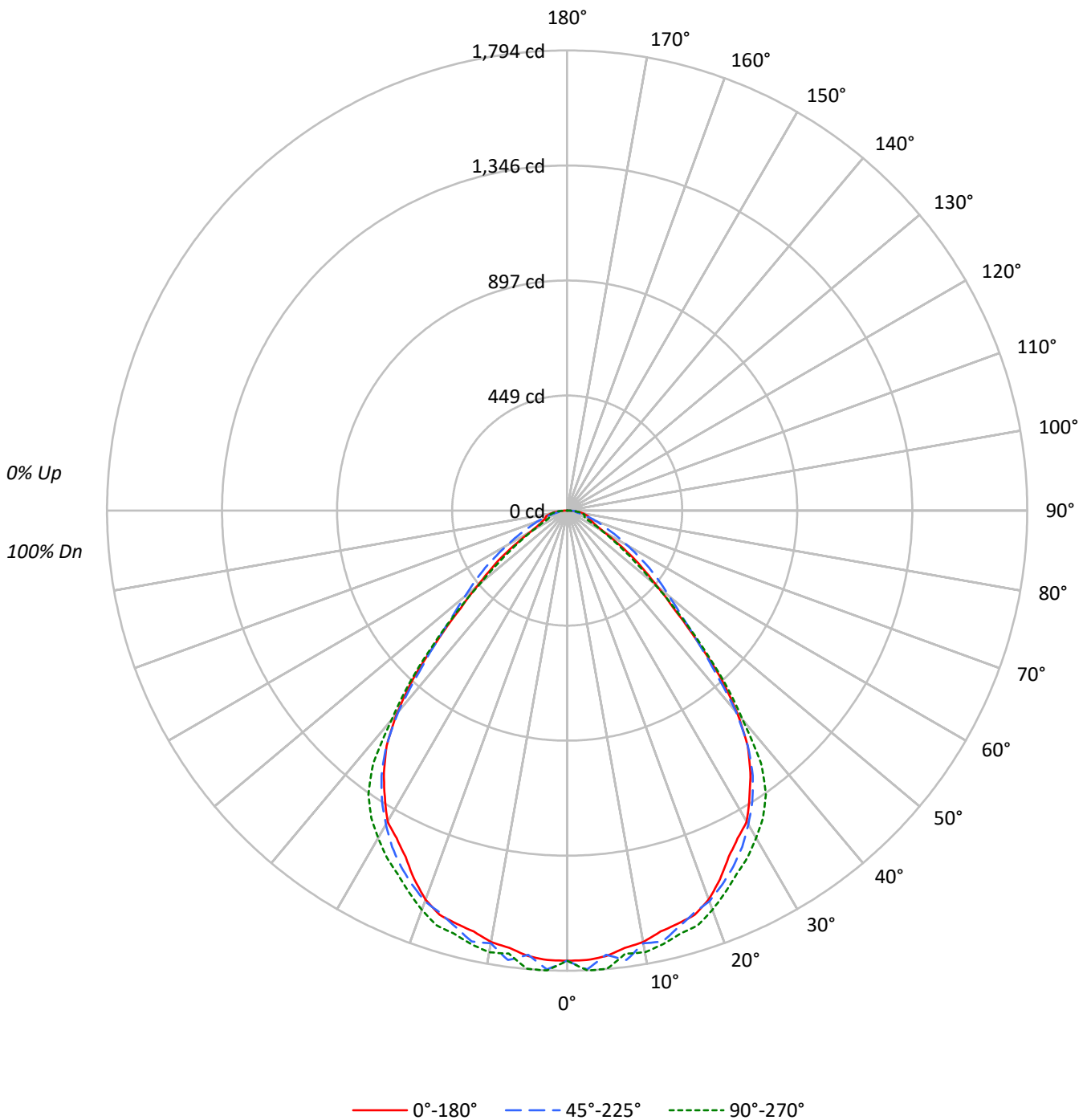
Input Watts (W): 27.993
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4722	4722	4722
5°	4710	4695	4843
10°	4667	4680	4777
15°	4645	4681	4756
20°	4621	4643	4743
25°	4423	4548	4643
30°	4351	4390	4578
35°	4092	4144	4438
40°	3626	3600	3743
45°	2708	2714	2790
50°	1906	2169	1847
55°	1407	1831	1262
60°	879	1447	824
65°	717	1147	576
70°	711	955	568
75°	883	701	734
80°	984	553	897
85°	979	1028	1003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.0	5.0
10°-20°	475.8	14.1
20°-30°	704.7	20.9
30°-40°	789.4	23.4
40°-50°	580.0	17.2
50°-60°	324.2	9.6
60°-70°	180.7	5.4
70°-80°	106.2	3.2
80°-90°	39.0	1.2
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°	1347.5	40.0
0°-40°	2136.9	63.5
0°-60°	3041.1	90.3
0°-90°	3367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3367.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1755	1755	1755	1755	1755	
5°	1744	1776	1738	1774	1793	165
15°	1668	1678	1680	1706	1707	471
25°	1490	1502	1532	1553	1564	690
35°	1246	1246	1261	1318	1351	772
45°	712	770	713	764	733	556
55°	300	365	390	390	269	268
65°	113	200	180	231	90	116
75°	85	120	67	136	71	85
85°	32	47	33	43	32	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1754.8	1754.8	1754.8	1754.8	1754.8
2.5°	1754.0	1769.9	1790.5	1792.9	1794.5
5°	1743.7	1776.2	1738.1	1773.8	1792.9
7.5°	1719.9	1739.7	1767.5	1731.8	1742.1
10°	1708.0	1712.7	1712.7	1757.2	1748.4
12.5°	1681.0	1712.7	1720.7	1711.9	1731.0
15°	1667.5	1677.8	1680.2	1705.6	1707.2
17.5°	1652.5	1650.1	1644.5	1662.8	1695.3
20°	1613.6	1604.9	1621.5	1643.7	1656.4
22.5°	1556.5	1558.8	1578.7	1596.9	1611.2
25°	1489.8	1501.7	1531.9	1553.3	1563.6
27.5°	1439.8	1457.3	1477.9	1503.3	1523.9
30°	1400.2	1398.6	1412.9	1449.4	1473.2
32.5°	1323.2	1328.8	1343.9	1387.5	1420.8
35°	1245.5	1246.3	1261.4	1318.5	1351.0
37.5°	1155.8	1149.5	1158.2	1220.1	1241.5
40°	1032.1	1033.7	1024.9	1068.6	1065.4
42.5°	887.7	900.4	855.2	912.3	908.3
45°	711.6	769.5	713.2	764.0	733.0
47.5°	561.7	647.3	600.5	637.8	579.9
50°	455.4	543.4	518.0	534.7	441.1
52.5°	373.6	445.0	453.0	456.9	344.3
55°	299.9	364.9	390.3	389.5	268.9
57.5°	221.3	296.7	326.0	337.9	203.9
60°	163.4	246.7	268.9	295.1	153.1
62.5°	131.7	216.6	222.1	258.6	116.6
65°	112.6	199.9	180.1	230.9	90.4
67.5°	100.0	186.4	146.8	206.3	77.0
70°	90.4	165.8	121.4	184.8	72.2
72.5°	88.1	141.2	93.6	165.0	71.4
75°	84.9	119.8	67.4	135.7	70.6
77.5°	73.0	102.3	48.4	104.7	65.8
80°	63.5	81.7	35.7	78.5	57.9
82.5°	49.2	61.9	31.7	59.5	46.8
85°	31.7	46.8	33.3	42.8	32.5
87.5°	15.1	26.2	23.8	23.0	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)