

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: P292639

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292639
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-L93050-W2A1-U-5000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3327.0 lumens
Efficiency: N/A
Efficacy: 113.6 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

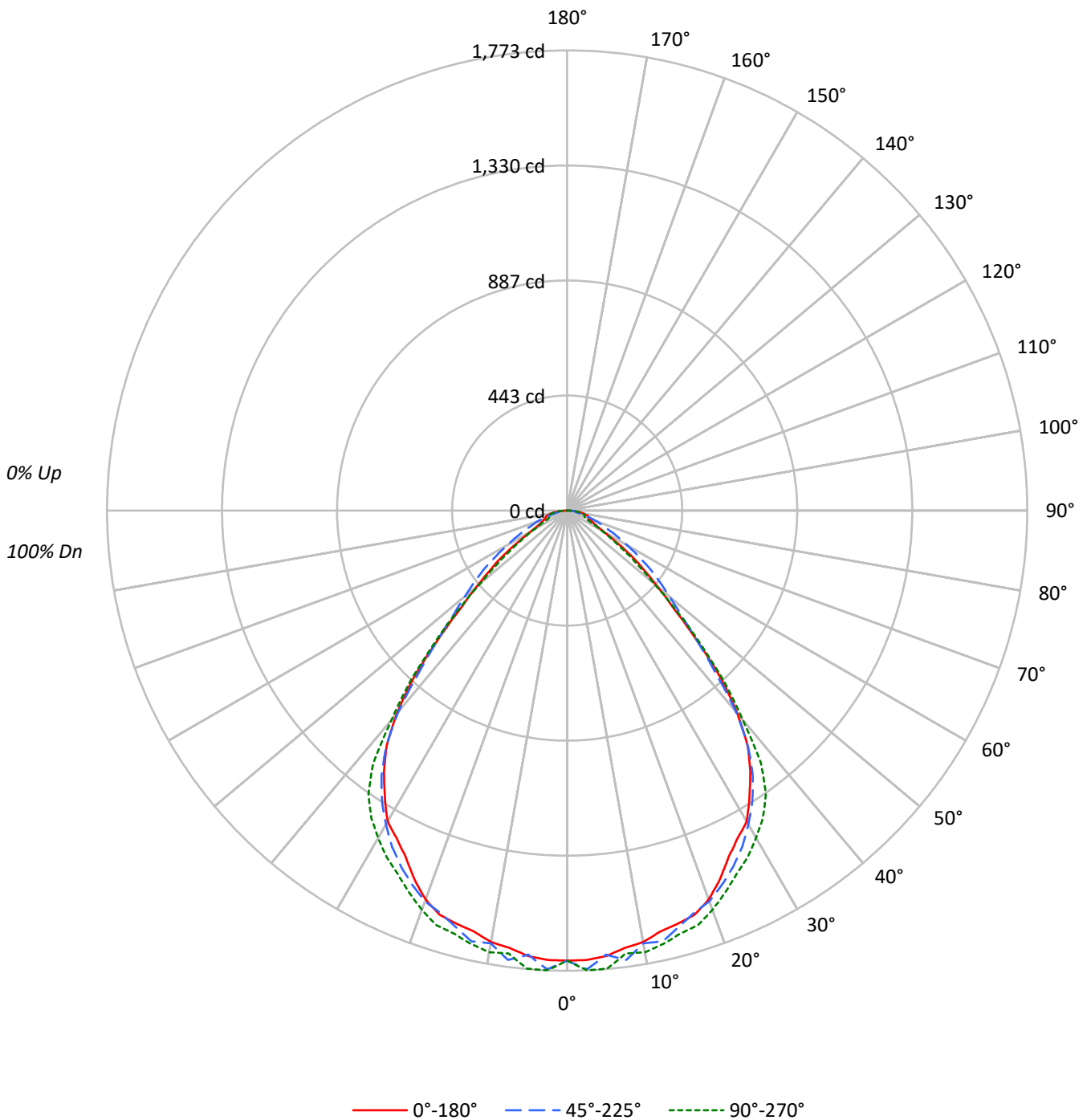
Input Watts (W): 29.295
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4666	4666	4666
5°	4654	4639	4786
10°	4612	4624	4721
15°	4590	4625	4700
20°	4566	4588	4687
25°	4371	4494	4587
30°	4299	4338	4523
35°	4043	4095	4385
40°	3582	3558	3698
45°	2676	2682	2756
50°	1883	2143	1824
55°	1390	1810	1247
60°	869	1430	814
65°	709	1133	569
70°	703	943	561
75°	872	692	726
80°	972	547	886
85°	969	1016	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	5.0
10°-20°	470.1	14.1
20°-30°	696.3	20.9
30°-40°	780.0	23.4
40°-50°	573.1	17.2
50°-60°	320.4	9.6
60°-70°	178.5	5.4
70°-80°	104.9	3.2
80°-90°	38.5	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°	1331.5	40.0
0°-40°	2111.5	63.5
0°-60°	3005.0	90.3
0°-90°	3327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1723	1755	1718	1753	1772	163
15°	1648	1658	1660	1685	1687	465
25°	1472	1484	1514	1535	1545	682
35°	1231	1232	1246	1303	1335	762
45°	703	760	705	755	724	549
55°	296	361	386	385	266	264
65°	111	198	178	228	89	115
75°	84	118	67	134	70	84
85°	31	46	33	42	32	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1733.9	1733.9	1733.9	1733.9	1733.9
2.5°	1733.2	1748.8	1769.2	1771.6	1773.1
5°	1723.0	1755.1	1717.5	1752.8	1771.6
7.5°	1699.4	1719.0	1746.5	1711.2	1721.4
10°	1687.7	1692.4	1692.4	1736.3	1727.7
12.5°	1661.0	1692.4	1700.2	1691.6	1710.4
15°	1647.7	1657.9	1660.3	1685.3	1686.9
17.5°	1632.8	1630.5	1625.0	1643.0	1675.1
20°	1594.4	1585.8	1602.2	1624.2	1636.7
22.5°	1538.0	1540.3	1559.9	1577.9	1592.1
25°	1472.1	1483.9	1513.7	1534.8	1545.0
27.5°	1422.7	1440.0	1460.4	1485.5	1505.8
30°	1383.5	1382.0	1396.1	1432.1	1455.7
32.5°	1307.5	1313.0	1327.9	1371.0	1403.9
35°	1230.7	1231.5	1246.4	1302.8	1334.9
37.5°	1142.1	1135.8	1144.5	1205.6	1226.8
40°	1019.8	1021.4	1012.8	1055.9	1052.7
42.5°	877.2	889.7	845.0	901.5	897.5
45°	703.1	760.4	704.7	754.9	724.3
47.5°	555.0	639.6	593.4	630.2	573.0
50°	449.9	537.0	511.9	528.3	435.8
52.5°	369.2	439.8	447.6	451.5	340.2
55°	296.3	360.6	385.7	384.9	265.7
57.5°	218.7	293.2	322.2	333.9	201.5
60°	161.5	243.8	265.7	291.6	151.3
62.5°	130.1	214.0	219.5	255.5	115.2
65°	111.3	197.5	177.9	228.1	89.4
67.5°	98.8	184.2	145.0	203.8	76.0
70°	89.4	163.8	119.9	182.6	71.3
72.5°	87.0	139.5	92.5	163.0	70.5
75°	83.9	118.4	66.6	134.0	69.8
77.5°	72.1	101.1	47.8	103.5	65.1
80°	62.7	80.7	35.3	77.6	57.2
82.5°	48.6	61.1	31.4	58.8	46.2
85°	31.4	46.2	32.9	42.3	32.1
87.5°	14.9	25.9	23.5	22.7	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)