

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: P292590

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292590
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-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3480.0 lumens
Efficiency: N/A
Efficacy: 123.5 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

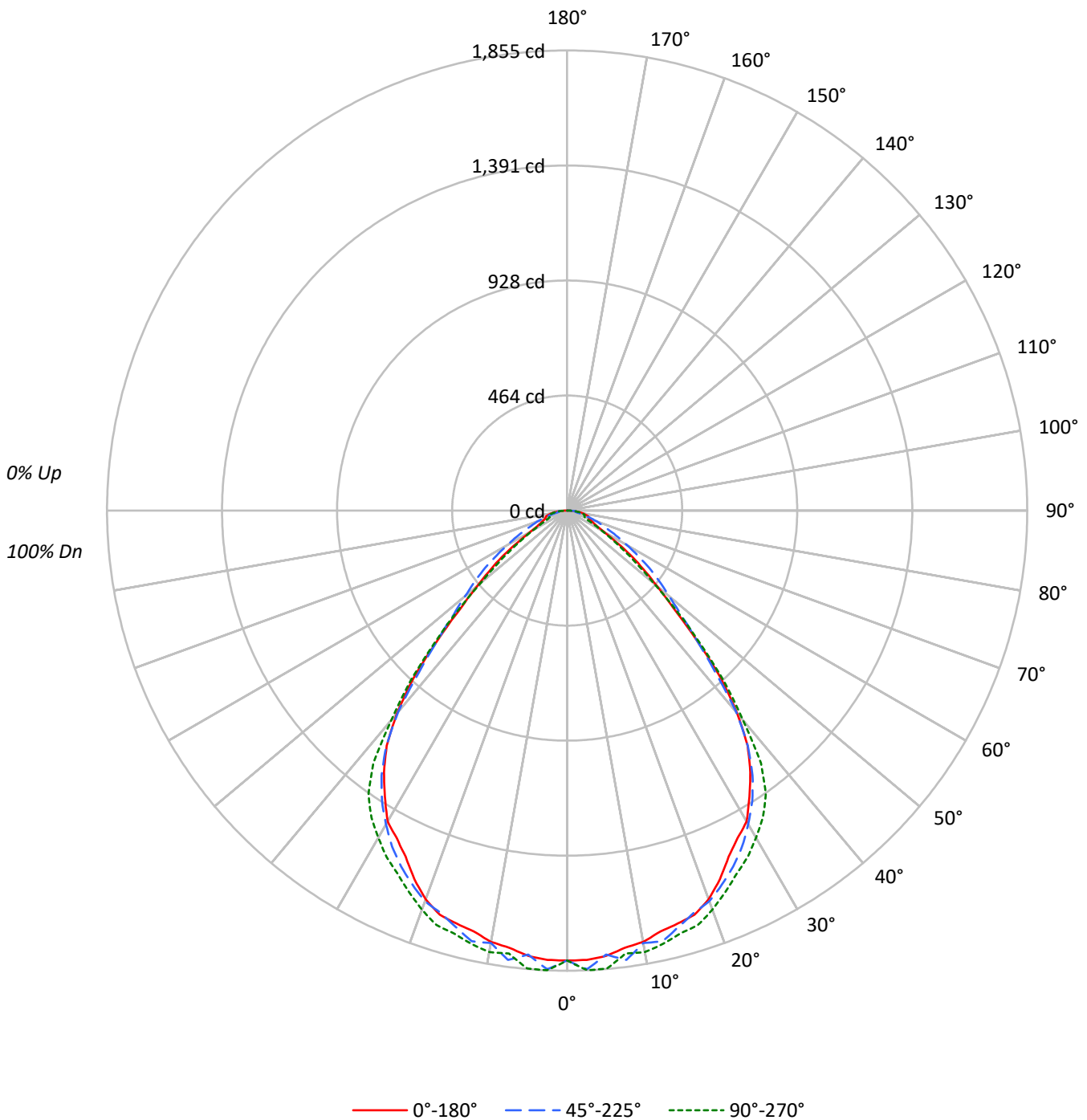
Input Watts (W): 28.179
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4881	4881	4881
5°	4868	4853	5005
10°	4824	4837	4938
15°	4802	4838	4916
20°	4776	4799	4903
25°	4572	4701	4798
30°	4497	4538	4731
35°	4229	4283	4587
40°	3747	3721	3868
45°	2799	2805	2883
50°	1970	2241	1909
55°	1454	1893	1304
60°	909	1496	851
65°	741	1185	595
70°	736	987	587
75°	912	725	759
80°	1017	572	928
85°	1013	1062	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.7	5.0
10°-20°	491.8	14.1
20°-30°	728.4	20.9
30°-40°	815.9	23.4
40°-50°	599.5	17.2
50°-60°	335.1	9.6
60°-70°	186.8	5.4
70°-80°	109.7	3.2
80°-90°	40.3	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°	1392.8	40.0
0°-40°	2208.6	63.5
0°-60°	3143.2	90.3
0°-90°	3480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3480.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1814	1814	1814	1814	1814	
5°	1802	1836	1796	1833	1853	171
15°	1724	1734	1737	1763	1764	487
25°	1540	1552	1583	1605	1616	714
35°	1287	1288	1304	1363	1396	797
45°	736	795	737	790	758	575
55°	310	377	403	403	278	277
65°	116	207	186	239	94	120
75°	88	124	70	140	73	88
85°	33	48	34	44	34	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1813.7	1813.7	1813.7	1813.7	1813.7
2.5°	1812.9	1829.3	1850.6	1853.0	1854.7
5°	1802.2	1835.8	1796.5	1833.4	1853.0
7.5°	1777.6	1798.1	1826.8	1789.9	1800.6
10°	1765.3	1770.2	1770.2	1816.1	1807.1
12.5°	1737.4	1770.2	1778.4	1769.4	1789.1
15°	1723.5	1734.1	1736.6	1762.8	1764.5
17.5°	1707.9	1705.4	1699.7	1718.6	1752.2
20°	1667.7	1658.7	1675.9	1698.9	1712.0
22.5°	1608.7	1611.2	1631.7	1650.5	1665.3
25°	1539.8	1552.1	1583.3	1605.4	1616.1
27.5°	1488.2	1506.2	1527.5	1553.8	1575.1
30°	1447.2	1445.5	1460.3	1498.0	1522.6
32.5°	1367.6	1373.4	1389.0	1434.1	1468.5
35°	1287.3	1288.1	1303.7	1362.7	1396.3
37.5°	1194.6	1188.1	1197.1	1261.0	1283.2
40°	1066.7	1068.4	1059.3	1104.4	1101.2
42.5°	917.5	930.6	883.9	942.9	938.8
45°	735.5	795.3	737.1	789.6	757.6
47.5°	580.5	669.1	620.7	659.2	599.4
50°	470.6	561.7	535.4	552.6	455.9
52.5°	386.2	460.0	468.2	472.3	355.8
55°	309.9	377.2	403.4	402.6	278.0
57.5°	228.8	306.7	337.0	349.3	210.7
60°	168.9	255.0	278.0	305.0	158.2
62.5°	136.1	223.8	229.6	267.3	120.5
65°	116.4	206.6	186.1	238.6	93.5
67.5°	103.3	192.7	151.7	213.2	79.5
70°	93.5	171.4	125.4	191.0	74.6
72.5°	91.0	145.9	96.8	170.5	73.8
75°	87.7	123.8	69.7	140.2	73.0
77.5°	75.4	105.8	50.0	108.2	68.1
80°	65.6	84.5	36.9	81.2	59.9
82.5°	50.8	64.0	32.8	61.5	48.4
85°	32.8	48.4	34.4	44.3	33.6
87.5°	15.6	27.1	24.6	23.8	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)