

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: P292589

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292589  
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-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: 3363.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 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

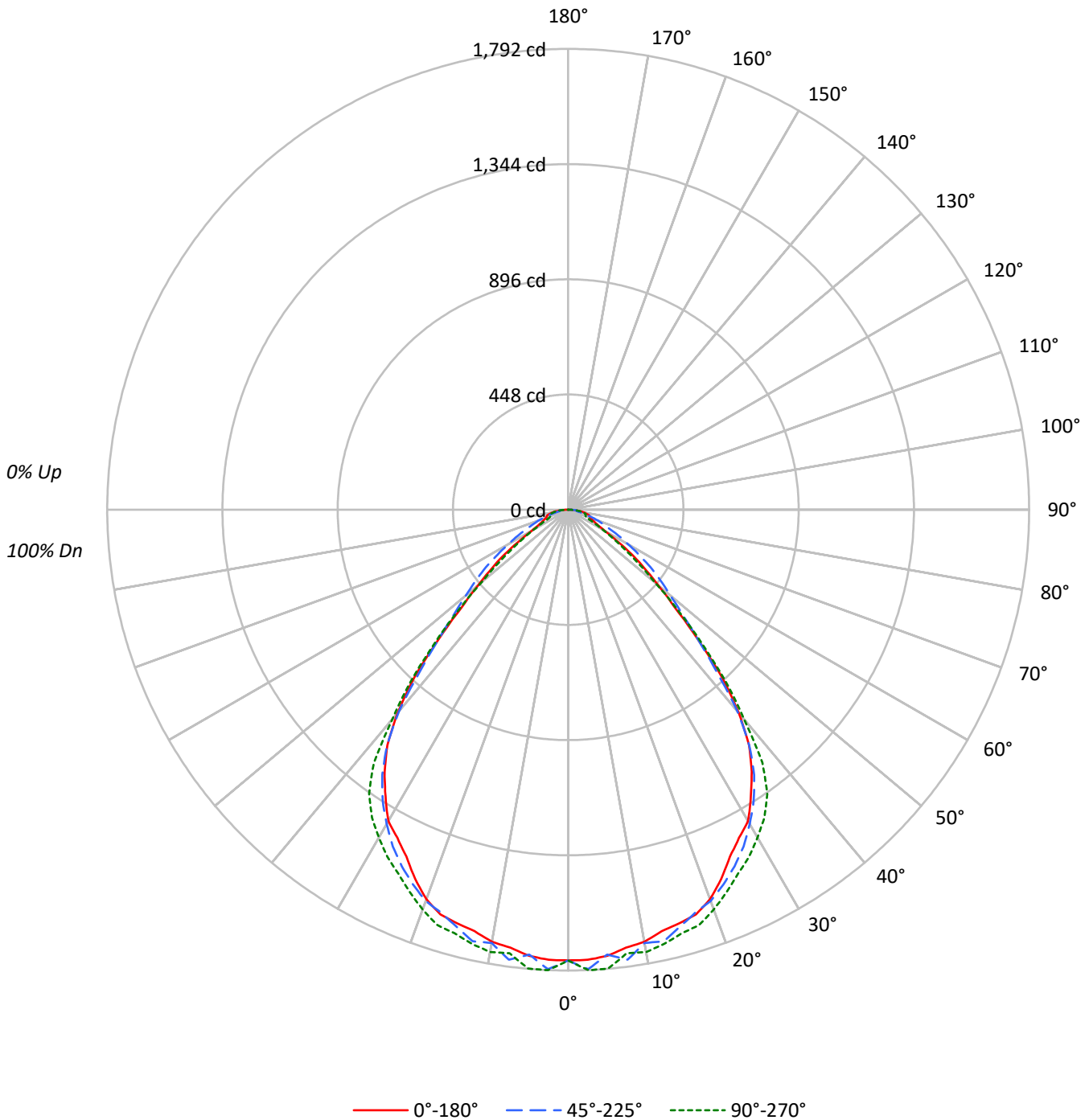
Input Watts (W): 27.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4716	4716	4716
5°	4705	4690	4837
10°	4662	4674	4772
15°	4640	4675	4751
20°	4615	4638	4738
25°	4418	4543	4637
30°	4346	4385	4572
35°	4087	4139	4433
40°	3621	3596	3738
45°	2705	2711	2786
50°	1904	2166	1845
55°	1405	1829	1260
60°	878	1446	823
65°	716	1145	575
70°	710	954	567
75°	882	701	733
80°	982	553	896
85°	979	1028	1003



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.8	5.0
10°-20°	475.2	14.1
20°-30°	703.9	20.9
30°-40°	788.4	23.4
40°-50°	579.3	17.2
50°-60°	323.8	9.6
60°-70°	180.5	5.4
70°-80°	106.0	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°	1345.9	40.0
0°-40°	2134.4	63.5
0°-60°	3037.5	90.3
0°-90°	3363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3363.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1742	1774	1736	1772	1791	165
15°	1666	1676	1678	1704	1705	470
25°	1488	1500	1530	1551	1562	690
35°	1244	1245	1260	1317	1349	771
45°	711	769	712	763	732	555
55°	300	364	390	389	269	267
65°	112	200	180	231	90	116
75°	85	120	67	136	70	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°	1752.7	1752.7	1752.7	1752.7	1752.7
2.5°	1751.9	1767.8	1788.4	1790.7	1792.3
5°	1741.6	1774.1	1736.1	1771.7	1790.7
7.5°	1717.8	1737.6	1765.4	1729.7	1740.0
10°	1706.0	1710.7	1710.7	1755.1	1746.4
12.5°	1679.0	1710.7	1718.6	1709.9	1728.9
15°	1665.5	1675.8	1678.2	1703.6	1705.2
17.5°	1650.5	1648.1	1642.6	1660.8	1693.3
20°	1611.7	1602.9	1619.6	1641.8	1654.4
22.5°	1554.6	1557.0	1576.8	1595.0	1609.3
25°	1488.1	1499.9	1530.0	1551.4	1561.7
27.5°	1438.1	1455.6	1476.2	1501.5	1522.1
30°	1398.5	1396.9	1411.2	1447.6	1471.4
32.5°	1321.7	1327.2	1342.3	1385.8	1419.1
35°	1244.0	1244.8	1259.9	1316.9	1349.4
37.5°	1154.5	1148.1	1156.8	1218.7	1240.0
40°	1030.9	1032.4	1023.7	1067.3	1064.1
42.5°	886.7	899.3	854.2	911.2	907.3
45°	710.7	768.6	712.3	763.0	732.1
47.5°	561.0	646.6	599.8	637.1	579.2
50°	454.8	542.8	517.4	534.1	440.6
52.5°	373.2	444.5	452.4	456.4	343.9
55°	299.5	364.5	389.8	389.0	268.6
57.5°	221.1	296.3	325.7	337.5	203.6
60°	163.2	246.4	268.6	294.8	152.9
62.5°	131.5	216.3	221.9	258.3	116.5
65°	112.5	199.7	179.9	230.6	90.3
67.5°	99.8	186.2	146.6	206.0	76.9
70°	90.3	165.6	121.2	184.6	72.1
72.5°	88.0	141.0	93.5	164.8	71.3
75°	84.8	119.6	67.4	135.5	70.5
77.5°	72.9	102.2	48.3	104.6	65.8
80°	63.4	81.6	35.7	78.4	57.8
82.5°	49.1	61.8	31.7	59.4	46.7
85°	31.7	46.7	33.3	42.8	32.5
87.5°	15.1	26.1	23.8	23.0	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)