

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: P292253

Luminaire Tested: **22GR-LD5-43-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292253  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-43-A-UNV-L93050-W2A1-U-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3377.0 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

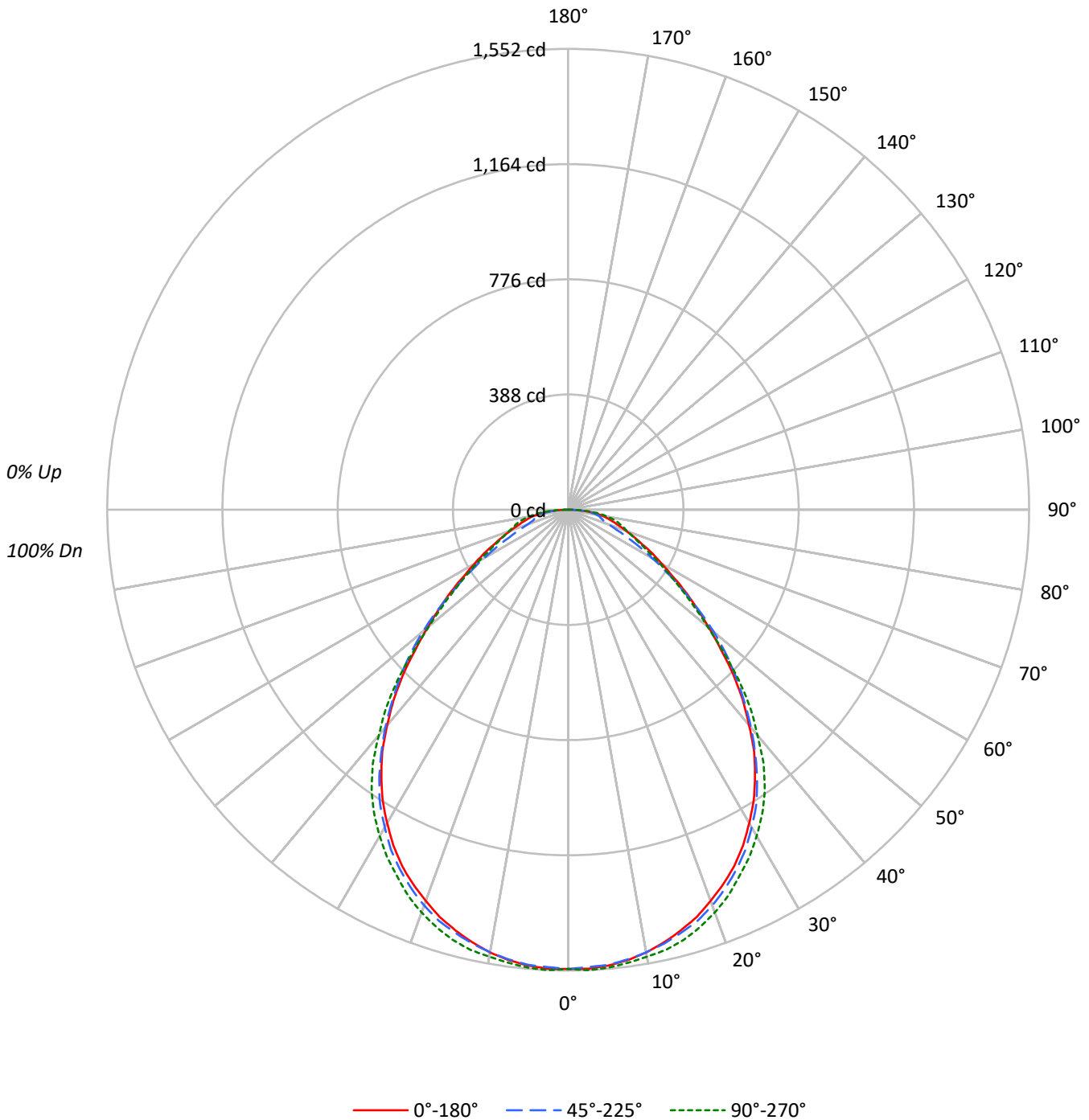
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4162	4162	4162
5°	4163	4156	4182
10°	4138	4136	4177
15°	4085	4107	4179
20°	4015	4062	4134
25°	3929	3974	4046
30°	3787	3838	3943
35°	3601	3642	3790
40°	3329	3365	3484
45°	2990	3044	3092
50°	2586	2678	2560
55°	2256	2198	2168
60°	1954	1759	1878
65°	1747	1381	1686
70°	1620	1144	1663
75°	1618	1209	1847
80°	1790	1522	2083
85°	1868	1649	2353



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.4	4.3
10°-20°	416.8	12.3
20°-30°	616.5	18.3
30°-40°	695.7	20.6
40°-50°	613.3	18.2
50°-60°	420.7	12.5
60°-70°	248.2	7.4
70°-80°	154.9	4.6
80°-90°	64.6	1.9
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°	1179.6	34.9
0°-40°	1875.3	55.5
0°-60°	2909.3	86.1
0°-90°	3377.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3377.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1546	1546	1546	1546	1546	
5°	1541	1538	1539	1544	1548	146
15°	1466	1468	1474	1492	1500	413
25°	1323	1328	1338	1356	1363	608
35°	1096	1106	1109	1136	1154	683
45°	786	790	800	805	813	604
55°	481	469	468	453	462	431
65°	274	241	217	251	265	276
75°	156	140	116	163	178	167
85°	60	57	53	70	76	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1546.5	1546.5	1546.5	1546.5	1546.5
2.5°	1547.3	1543.4	1541.8	1548.1	1552.0
5°	1541.0	1537.9	1538.7	1544.2	1548.1
7.5°	1530.0	1527.7	1527.7	1535.5	1539.5
10°	1514.3	1513.5	1513.5	1523.0	1528.5
12.5°	1492.3	1493.1	1496.2	1508.8	1518.3
15°	1466.4	1468.0	1474.2	1492.3	1500.2
17.5°	1438.1	1438.1	1450.7	1464.8	1474.2
20°	1401.9	1404.3	1418.5	1434.2	1443.6
22.5°	1365.0	1368.9	1380.7	1398.8	1407.4
25°	1323.4	1328.1	1338.3	1355.6	1362.7
27.5°	1274.6	1280.9	1291.9	1304.5	1319.4
30°	1218.8	1228.3	1235.3	1252.6	1269.1
32.5°	1162.3	1170.9	1178.8	1196.8	1215.7
35°	1096.3	1105.7	1108.8	1135.5	1153.6
37.5°	1028.7	1032.6	1034.2	1060.9	1080.5
40°	947.7	955.6	957.9	979.2	991.7
42.5°	869.9	873.1	877.8	893.5	908.4
45°	785.8	789.8	800.0	804.7	812.6
47.5°	697.8	709.6	721.4	706.5	707.3
50°	617.7	627.1	639.7	611.4	611.4
52.5°	546.2	550.9	551.7	528.1	532.8
55°	480.9	469.1	468.4	452.6	462.1
57.5°	415.7	400.0	394.5	389.8	400.8
60°	363.1	334.8	326.9	334.0	348.9
62.5°	319.8	283.7	268.8	286.8	300.2
65°	274.3	241.3	216.9	250.7	264.8
67.5°	238.9	207.5	176.0	224.0	234.2
70°	205.9	181.5	145.4	203.5	211.4
72.5°	179.2	160.3	125.7	183.9	193.3
75°	155.6	139.9	116.3	162.7	177.6
77.5°	136.7	119.4	108.4	140.7	158.7
80°	115.5	98.2	98.2	117.9	134.4
82.5°	91.2	77.0	79.4	95.9	107.7
85°	60.5	56.6	53.4	69.9	76.2
87.5°	30.6	31.4	28.3	36.1	36.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)