

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: P292245

Luminaire Tested: **22GR-LD5-36-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292245  
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-LD5-36-A-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3311.0 lumens  
Efficiency: N/A  
Efficacy: 114.8 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

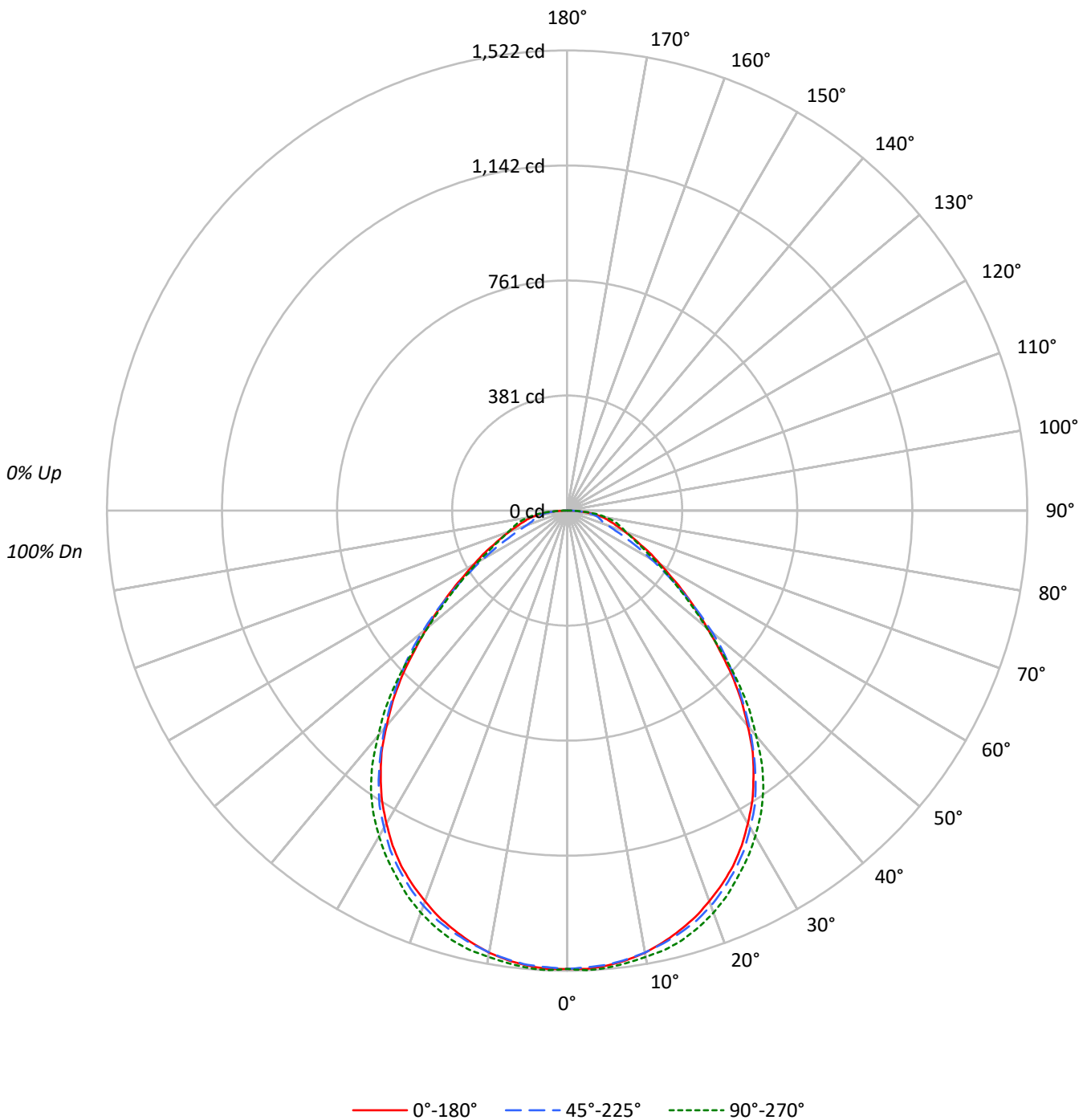
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4080	4080	4080
5°	4081	4075	4100
10°	4057	4055	4095
15°	4005	4027	4098
20°	3936	3983	4053
25°	3852	3896	3967
30°	3713	3764	3866
35°	3531	3572	3716
40°	3264	3299	3416
45°	2932	2985	3032
50°	2535	2626	2509
55°	2212	2154	2125
60°	1916	1725	1841
65°	1712	1354	1654
70°	1589	1121	1631
75°	1587	1185	1810
80°	1756	1492	2042
85°	1831	1618	2306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.5	4.3
10°-20°	408.7	12.3
20°-30°	604.4	18.3
30°-40°	682.1	20.6
40°-50°	601.3	18.2
50°-60°	412.5	12.5
60°-70°	243.4	7.4
70°-80°	151.9	4.6
80°-90°	63.3	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°	1156.6	34.9
0°-40°	1838.7	55.5
0°-60°	2852.4	86.1
0°-90°	3311.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3311.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1511	1508	1509	1514	1518	143
15°	1438	1439	1445	1463	1471	405
25°	1298	1302	1312	1329	1336	596
35°	1075	1084	1087	1113	1131	670
45°	770	774	784	789	797	592
55°	472	460	459	444	453	423
65°	269	236	213	246	260	271
75°	153	137	114	160	174	164
85°	59	56	52	69	75	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1516.3	1516.3	1516.3	1516.3	1516.3
2.5°	1517.1	1513.2	1511.7	1517.9	1521.7
5°	1510.9	1507.8	1508.6	1514.0	1517.9
7.5°	1500.1	1497.8	1497.8	1505.5	1509.4
10°	1484.7	1484.0	1484.0	1493.2	1498.6
12.5°	1463.2	1463.9	1467.0	1479.3	1488.6
15°	1437.7	1439.3	1445.4	1463.2	1470.9
17.5°	1410.0	1410.0	1422.3	1436.2	1445.4
20°	1374.5	1376.9	1390.7	1406.1	1415.4
22.5°	1338.3	1342.2	1353.7	1371.5	1379.9
25°	1297.5	1302.1	1312.1	1329.1	1336.0
27.5°	1249.7	1255.9	1266.7	1279.0	1293.6
30°	1195.0	1204.3	1211.2	1228.2	1244.3
32.5°	1139.6	1148.0	1155.7	1173.5	1191.9
35°	1074.8	1084.1	1087.2	1113.4	1131.1
37.5°	1008.6	1012.4	1014.0	1040.2	1059.4
40°	929.2	936.9	939.2	960.0	972.4
42.5°	852.9	856.0	860.6	876.0	890.7
45°	770.5	774.3	784.4	789.0	796.7
47.5°	684.2	695.7	707.3	692.7	693.4
50°	605.6	614.8	627.2	599.4	599.4
52.5°	535.5	540.1	540.9	517.8	522.4
55°	471.5	460.0	459.2	443.8	453.0
57.5°	407.6	392.2	386.8	382.2	392.9
60°	356.0	328.2	320.5	327.5	342.1
62.5°	313.6	278.1	263.5	281.2	294.3
65°	268.9	236.5	212.7	245.8	259.7
67.5°	234.2	203.4	172.6	219.6	229.6
70°	201.9	178.0	142.5	199.6	207.3
72.5°	175.7	157.2	123.3	180.3	189.5
75°	152.6	137.1	114.0	159.5	174.1
77.5°	134.1	117.1	106.3	137.9	155.6
80°	113.3	96.3	96.3	115.6	131.8
82.5°	89.4	75.5	77.8	94.0	105.6
85°	59.3	55.5	52.4	68.6	74.7
87.5°	30.0	30.8	27.7	35.4	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)