

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: P292143

Luminaire Tested: **22GR-LD5-32-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292143  
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-LD5-32-A-UNV-L83050-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3406.0 lumens  
Efficiency: N/A  
Efficacy: 132.2 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

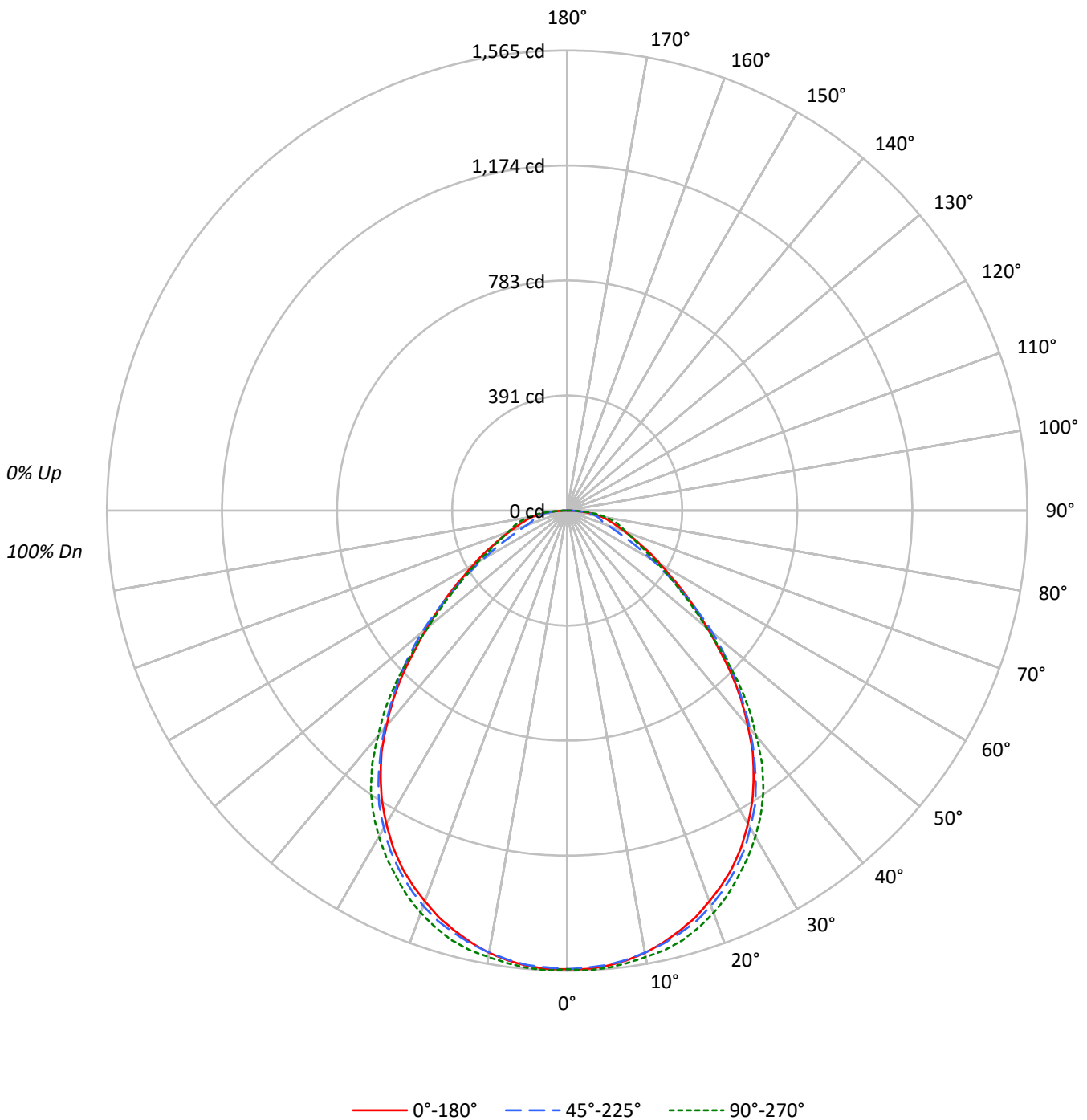
Input Watts (W): 25.761  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4197	4197	4197
5°	4199	4192	4218
10°	4173	4171	4212
15°	4120	4142	4215
20°	4049	4097	4170
25°	3963	4008	4081
30°	3820	3872	3977
35°	3632	3674	3822
40°	3358	3394	3514
45°	3016	3071	3119
50°	2608	2701	2581
55°	2276	2216	2186
60°	1971	1774	1894
65°	1761	1393	1701
70°	1634	1153	1677
75°	1631	1220	1862
80°	1805	1536	2100
85°	1883	1664	2374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.6	4.3
10°-20°	420.4	12.3
20°-30°	621.8	18.3
30°-40°	701.6	20.6
40°-50°	618.5	18.2
50°-60°	424.3	12.5
60°-70°	250.4	7.4
70°-80°	156.2	4.6
80°-90°	65.2	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°	1189.8	34.9
0°-40°	1891.4	55.5
0°-60°	2934.2	86.1
0°-90°	3406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3406.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1554	1551	1552	1557	1561	147
15°	1479	1481	1487	1505	1513	417
25°	1335	1340	1350	1367	1374	613
35°	1106	1115	1118	1145	1164	689
45°	793	797	807	812	820	609
55°	485	473	472	456	466	435
65°	277	243	219	253	267	279
75°	157	141	117	164	179	168
85°	61	57	54	70	77	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1559.8	1559.8	1559.8	1559.8	1559.8
2.5°	1560.6	1556.7	1555.1	1561.4	1565.4
5°	1554.3	1551.1	1551.9	1557.4	1561.4
7.5°	1543.2	1540.8	1540.8	1548.7	1552.7
10°	1527.3	1526.5	1526.5	1536.0	1541.6
12.5°	1505.1	1505.9	1509.1	1521.8	1531.3
15°	1479.0	1480.6	1486.9	1505.1	1513.1
17.5°	1450.4	1450.4	1463.1	1477.4	1486.9
20°	1414.0	1416.4	1430.6	1446.5	1456.0
22.5°	1376.7	1380.7	1392.6	1410.8	1419.5
25°	1334.7	1339.5	1349.8	1367.2	1374.4
27.5°	1285.6	1291.9	1303.0	1315.7	1330.8
30°	1229.3	1238.8	1246.0	1263.4	1280.0
32.5°	1172.2	1181.0	1188.9	1207.1	1226.1
35°	1105.7	1115.2	1118.3	1145.3	1163.5
37.5°	1037.5	1041.5	1043.1	1070.0	1089.8
40°	955.9	963.8	966.2	987.6	1000.3
42.5°	877.4	880.6	885.3	901.2	916.2
45°	792.6	796.6	806.9	811.6	819.5
47.5°	703.8	715.7	727.6	712.5	713.3
50°	623.0	632.5	645.2	616.6	616.6
52.5°	550.9	555.6	556.4	532.6	537.4
55°	485.1	473.2	472.4	456.5	466.0
57.5°	419.3	403.4	397.9	393.1	404.2
60°	366.2	337.6	329.7	336.9	351.9
62.5°	322.6	286.1	271.1	289.3	302.8
65°	276.6	243.3	218.8	252.8	267.1
67.5°	240.9	209.2	177.5	225.9	236.2
70°	207.7	183.1	146.6	205.3	213.2
72.5°	180.7	161.7	126.8	185.5	195.0
75°	156.9	141.1	117.3	164.1	179.1
77.5°	137.9	120.5	109.4	141.9	160.1
80°	116.5	99.1	99.1	118.9	135.5
82.5°	91.9	77.7	80.1	96.7	108.6
85°	61.0	57.1	53.9	70.5	76.9
87.5°	30.9	31.7	28.5	36.5	37.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)