

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: P292188

Luminaire Tested: **22GR-LD5-32-A-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292188  
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-L82765-W2A1-U-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3034.0 lumens  
Efficiency: N/A  
Efficacy: 124.5 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

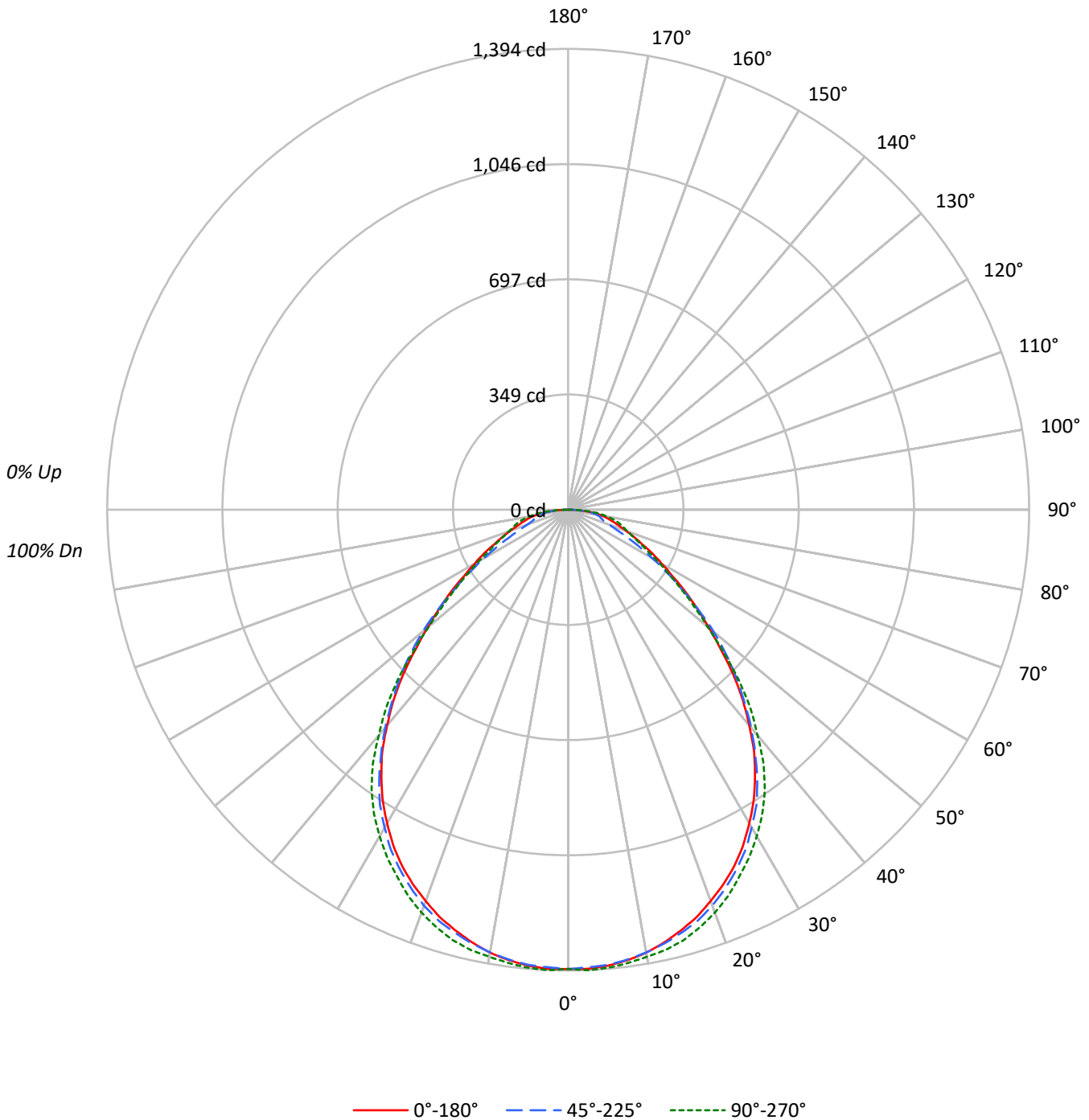
Input Watts (W): 24.366  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3739	3739	3739
5°	3740	3734	3757
10°	3718	3716	3752
15°	3670	3690	3755
20°	3607	3649	3714
25°	3530	3570	3635
30°	3402	3449	3543
35°	3235	3273	3405
40°	2991	3023	3130
45°	2687	2735	2778
50°	2323	2406	2300
55°	2027	1974	1947
60°	1756	1581	1687
65°	1569	1241	1515
70°	1456	1028	1494
75°	1454	1087	1659
80°	1609	1368	1870
85°	1680	1482	2115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.5	4.3
10°-20°	374.5	12.3
20°-30°	553.9	18.3
30°-40°	625.0	20.6
40°-50°	551.0	18.2
50°-60°	378.0	12.5
60°-70°	223.0	7.4
70°-80°	139.2	4.6
80°-90°	58.0	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°	1059.8	34.9
0°-40°	1684.8	55.5
0°-60°	2613.8	86.1
0°-90°	3034.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3034.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1384	1382	1382	1387	1391	131
15°	1317	1319	1324	1341	1348	371
25°	1189	1193	1202	1218	1224	546
35°	985	993	996	1020	1036	614
45°	706	710	719	723	730	542
55°	432	422	421	407	415	388
65°	246	217	195	225	238	248
75°	140	126	104	146	160	150
85°	54	51	48	63	68	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1389.5	1389.5	1389.5	1389.5	1389.5
2.5°	1390.2	1386.6	1385.2	1390.9	1394.4
5°	1384.5	1381.7	1382.4	1387.3	1390.9
7.5°	1374.6	1372.5	1372.5	1379.6	1383.1
10°	1360.5	1359.8	1359.8	1368.3	1373.2
12.5°	1340.7	1341.5	1344.3	1355.6	1364.0
15°	1317.4	1318.9	1324.5	1340.7	1347.8
17.5°	1292.0	1292.0	1303.3	1316.0	1324.5
20°	1259.6	1261.7	1274.4	1288.5	1297.0
22.5°	1226.4	1229.9	1240.5	1256.7	1264.5
25°	1189.0	1193.2	1202.4	1217.9	1224.3
27.5°	1145.2	1150.8	1160.7	1172.0	1185.4
30°	1095.0	1103.5	1109.9	1125.4	1140.2
32.5°	1044.2	1052.0	1059.0	1075.3	1092.2
35°	984.9	993.4	996.2	1020.2	1036.4
37.5°	924.2	927.7	929.1	953.1	970.8
40°	851.5	858.5	860.6	879.7	891.0
42.5°	781.6	784.4	788.6	802.8	816.2
45°	706.0	709.6	718.7	723.0	730.0
47.5°	627.0	637.5	648.1	634.7	635.4
50°	554.9	563.4	574.7	549.3	549.3
52.5°	490.7	494.9	495.6	474.5	478.7
55°	432.1	421.5	420.8	406.7	415.1
57.5°	373.5	359.4	354.4	350.2	360.1
60°	326.2	300.8	293.7	300.1	313.5
62.5°	287.4	254.9	241.5	257.7	269.7
65°	246.4	216.8	194.9	225.2	237.9
67.5°	214.6	186.4	158.2	201.2	210.4
70°	185.0	163.1	130.6	182.9	189.9
72.5°	161.0	144.0	113.0	165.2	173.7
75°	139.8	125.7	104.5	146.1	159.6
77.5°	122.8	107.3	97.4	126.4	142.6
80°	103.8	88.3	88.3	105.9	120.7
82.5°	81.9	69.2	71.3	86.1	96.7
85°	54.4	50.8	48.0	62.8	68.5
87.5°	27.5	28.2	25.4	32.5	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)