

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: P292190

Luminaire Tested: **22GR-LD5-32-A-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292190  
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-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3207.0 lumens  
Efficiency: N/A  
Efficacy: 129.2 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

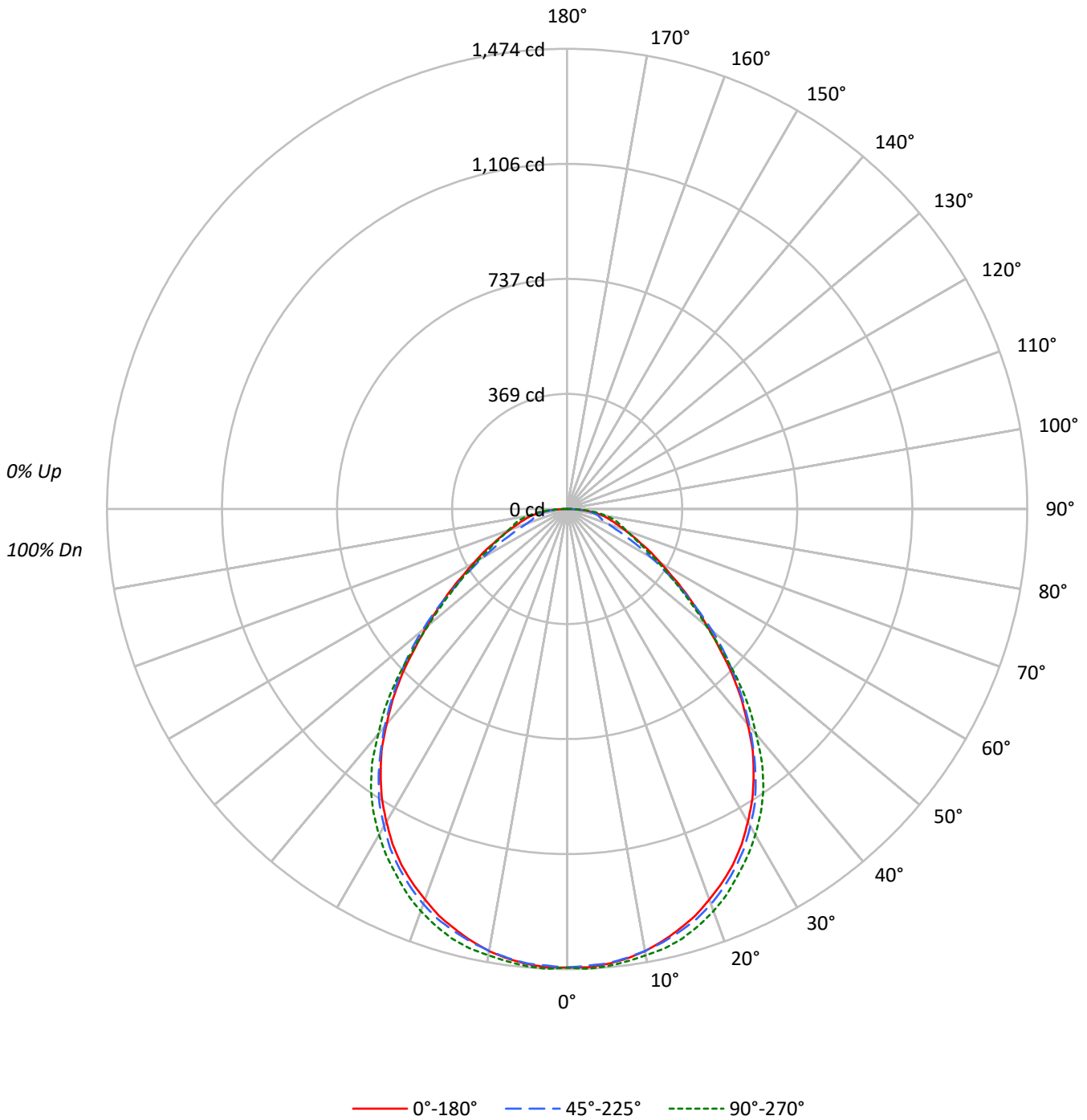
Input Watts (W): 24.831  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3952	3952	3952
5°	3953	3947	3971
10°	3930	3927	3966
15°	3880	3900	3969
20°	3813	3857	3926
25°	3731	3774	3842
30°	3597	3645	3745
35°	3420	3459	3599
40°	3162	3196	3308
45°	2840	2891	2937
50°	2456	2543	2431
55°	2143	2087	2059
60°	1856	1671	1784
65°	1659	1312	1601
70°	1538	1087	1580
75°	1537	1149	1754
80°	1700	1446	1977
85°	1775	1565	2235



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.0	4.3
10°-20°	395.8	12.3
20°-30°	585.4	18.3
30°-40°	660.6	20.6
40°-50°	582.4	18.2
50°-60°	399.5	12.5
60°-70°	235.8	7.4
70°-80°	147.1	4.6
80°-90°	61.3	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°	1120.3	34.9
0°-40°	1780.9	55.5
0°-60°	2762.8	86.1
0°-90°	3207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3207.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1464	1460	1461	1466	1470	139
15°	1393	1394	1400	1417	1425	393
25°	1257	1261	1271	1287	1294	577
35°	1041	1050	1053	1078	1096	649
45°	746	750	760	764	772	573
55°	457	446	445	430	439	410
65°	260	229	206	238	252	262
75°	148	133	110	154	169	158
85°	58	54	51	66	72	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1468.7	1468.7	1468.7	1468.7	1468.7
2.5°	1469.4	1465.7	1464.2	1470.2	1473.9
5°	1463.5	1460.5	1461.2	1466.5	1470.2
7.5°	1453.0	1450.8	1450.8	1458.2	1462.0
10°	1438.1	1437.3	1437.3	1446.3	1451.5
12.5°	1417.2	1417.9	1420.9	1432.9	1441.8
15°	1392.6	1394.1	1400.0	1417.2	1424.7
17.5°	1365.7	1365.7	1377.6	1391.1	1400.0
20°	1331.4	1333.6	1347.0	1362.0	1370.9
22.5°	1296.3	1300.0	1311.2	1328.4	1336.6
25°	1256.7	1261.2	1270.9	1287.3	1294.1
27.5°	1210.5	1216.4	1226.9	1238.8	1253.0
30°	1157.5	1166.4	1173.2	1189.6	1205.3
32.5°	1103.8	1112.0	1119.4	1136.6	1154.5
35°	1041.1	1050.0	1053.0	1078.4	1095.5
37.5°	976.9	980.6	982.1	1007.5	1026.1
40°	900.0	907.5	909.7	929.9	941.8
42.5°	826.1	829.1	833.6	848.5	862.7
45°	746.3	750.0	759.7	764.2	771.7
47.5°	662.7	673.9	685.1	670.9	671.7
50°	586.6	595.5	607.5	580.6	580.6
52.5°	518.7	523.1	523.9	501.5	506.0
55°	456.7	445.5	444.8	429.9	438.8
57.5°	394.8	379.9	374.6	370.2	380.6
60°	344.8	317.9	310.5	317.2	331.4
62.5°	303.7	269.4	255.2	272.4	285.1
65°	260.5	229.1	206.0	238.1	251.5
67.5°	226.9	197.0	167.2	212.7	222.4
70°	195.5	172.4	138.1	193.3	200.8
72.5°	170.2	152.2	119.4	174.6	183.6
75°	147.8	132.8	110.5	154.5	168.7
77.5°	129.9	113.4	103.0	133.6	150.7
80°	109.7	93.3	93.3	111.9	127.6
82.5°	86.6	73.1	75.4	91.0	102.2
85°	57.5	53.7	50.7	66.4	72.4
87.5°	29.1	29.9	26.9	34.3	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)