

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: P292141

Luminaire Tested: **22GR-LD5-32-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292141  
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-3500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3213.0 lumens  
Efficiency: N/A  
Efficacy: 130.9 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

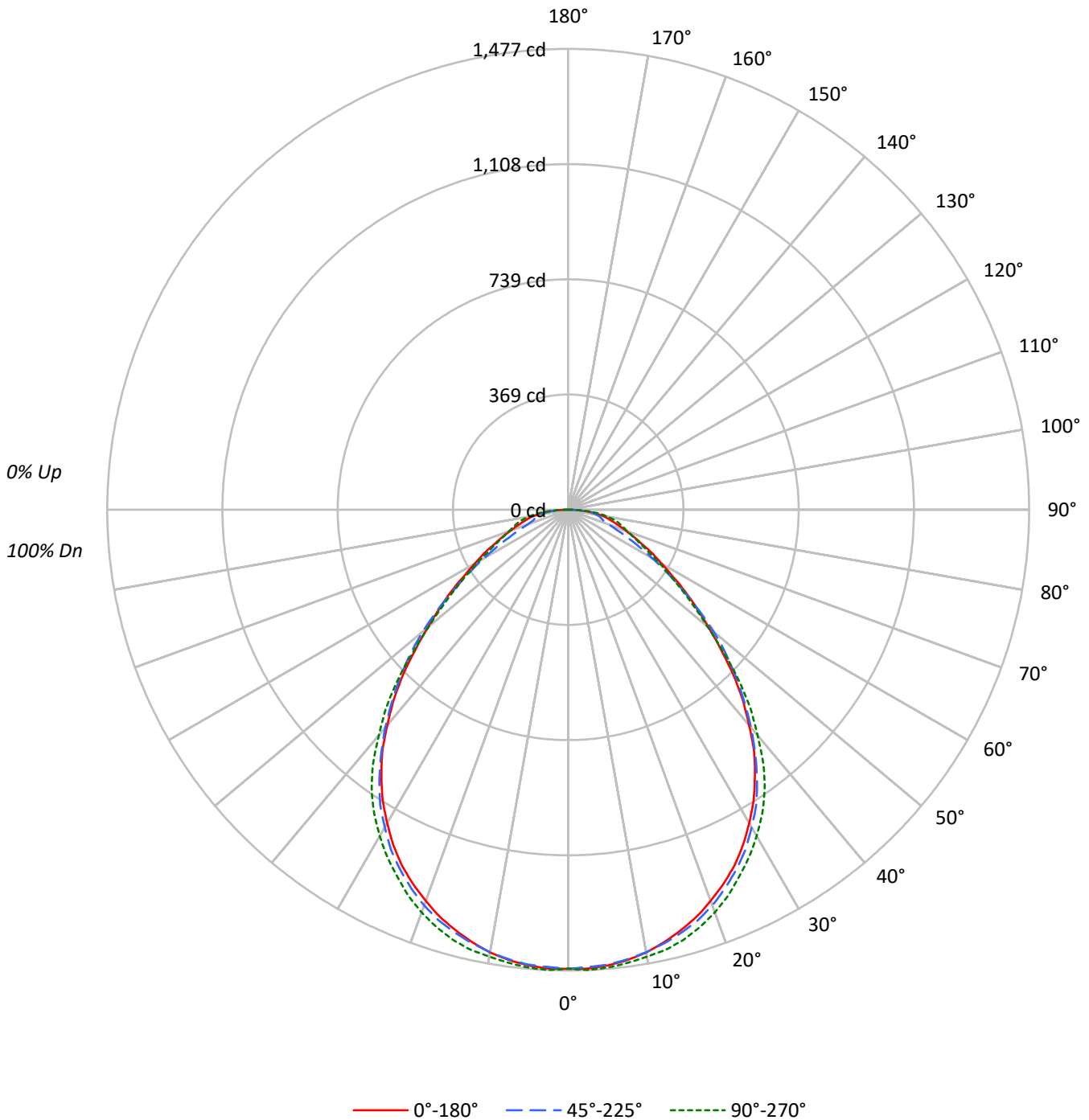
Input Watts (W): 24.552  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

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

	0°	45°	90°
0°	3960	3960	3960
5°	3961	3955	3979
10°	3937	3935	3974
15°	3887	3908	3976
20°	3820	3865	3933
25°	3738	3781	3850
30°	3604	3652	3752
35°	3426	3466	3606
40°	3168	3202	3315
45°	2845	2896	2942
50°	2460	2548	2435
55°	2147	2091	2062
60°	1859	1674	1787
65°	1661	1314	1605
70°	1541	1088	1582
75°	1539	1151	1757
80°	1703	1449	1982
85°	1778	1568	2238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.2	4.3
10°-20°	396.6	12.3
20°-30°	586.5	18.3
30°-40°	661.9	20.6
40°-50°	583.5	18.2
50°-60°	400.3	12.5
60°-70°	236.2	7.4
70°-80°	147.4	4.6
80°-90°	61.4	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°	1122.4	34.9
0°-40°	1784.3	55.5
0°-60°	2768.0	86.1
0°-90°	3213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3213.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1466	1463	1464	1469	1473	139
15°	1395	1397	1403	1420	1427	393
25°	1259	1264	1273	1290	1296	578
35°	1043	1052	1055	1080	1098	650
45°	748	751	761	766	773	574
55°	458	446	446	431	440	410
65°	261	230	206	238	252	263
75°	148	133	111	155	169	159
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°	1471.4	1471.4	1471.4	1471.4	1471.4
2.5°	1472.2	1468.4	1467.0	1472.9	1476.7
5°	1466.2	1463.2	1464.0	1469.2	1472.9
7.5°	1455.7	1453.5	1453.5	1461.0	1464.7
10°	1440.8	1440.0	1440.0	1449.0	1454.2
12.5°	1419.8	1420.6	1423.6	1435.5	1444.5
15°	1395.2	1396.7	1402.7	1419.8	1427.3
17.5°	1368.3	1368.3	1380.2	1393.7	1402.7
20°	1333.9	1336.1	1349.6	1364.5	1373.5
22.5°	1298.7	1302.5	1313.7	1330.9	1339.1
25°	1259.1	1263.6	1273.3	1289.8	1296.5
27.5°	1212.7	1218.7	1229.2	1241.2	1255.4
30°	1159.7	1168.6	1175.4	1191.8	1207.5
32.5°	1105.8	1114.0	1121.5	1138.7	1156.7
35°	1043.0	1052.0	1055.0	1080.4	1097.6
37.5°	978.7	982.5	983.9	1009.4	1028.1
40°	901.7	909.2	911.4	931.6	943.6
42.5°	827.7	830.7	835.2	850.1	864.3
45°	747.7	751.4	761.1	765.6	773.1
47.5°	663.9	675.2	686.4	672.2	672.9
50°	587.7	596.7	608.6	581.7	581.7
52.5°	519.6	524.1	524.9	502.4	506.9
55°	457.6	446.4	445.6	430.7	439.6
57.5°	395.5	380.6	375.3	370.9	381.3
60°	345.4	318.5	311.0	317.8	332.0
62.5°	304.3	269.9	255.7	272.9	285.6
65°	260.9	229.5	206.4	238.5	252.0
67.5°	227.3	197.4	167.5	213.1	222.8
70°	195.9	172.7	138.3	193.6	201.1
72.5°	170.5	152.5	119.6	175.0	183.9
75°	148.0	133.1	110.7	154.8	169.0
77.5°	130.1	113.6	103.2	133.8	151.0
80°	109.9	93.5	93.5	112.2	127.9
82.5°	86.7	73.3	75.5	91.2	102.4
85°	57.6	53.8	50.8	66.5	72.5
87.5°	29.2	29.9	26.9	34.4	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)