

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: P292189

Luminaire Tested: **22GR-LD5-32-A-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292189  
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-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: 3138.0 lumens  
Efficiency: N/A  
Efficacy: 127.3 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

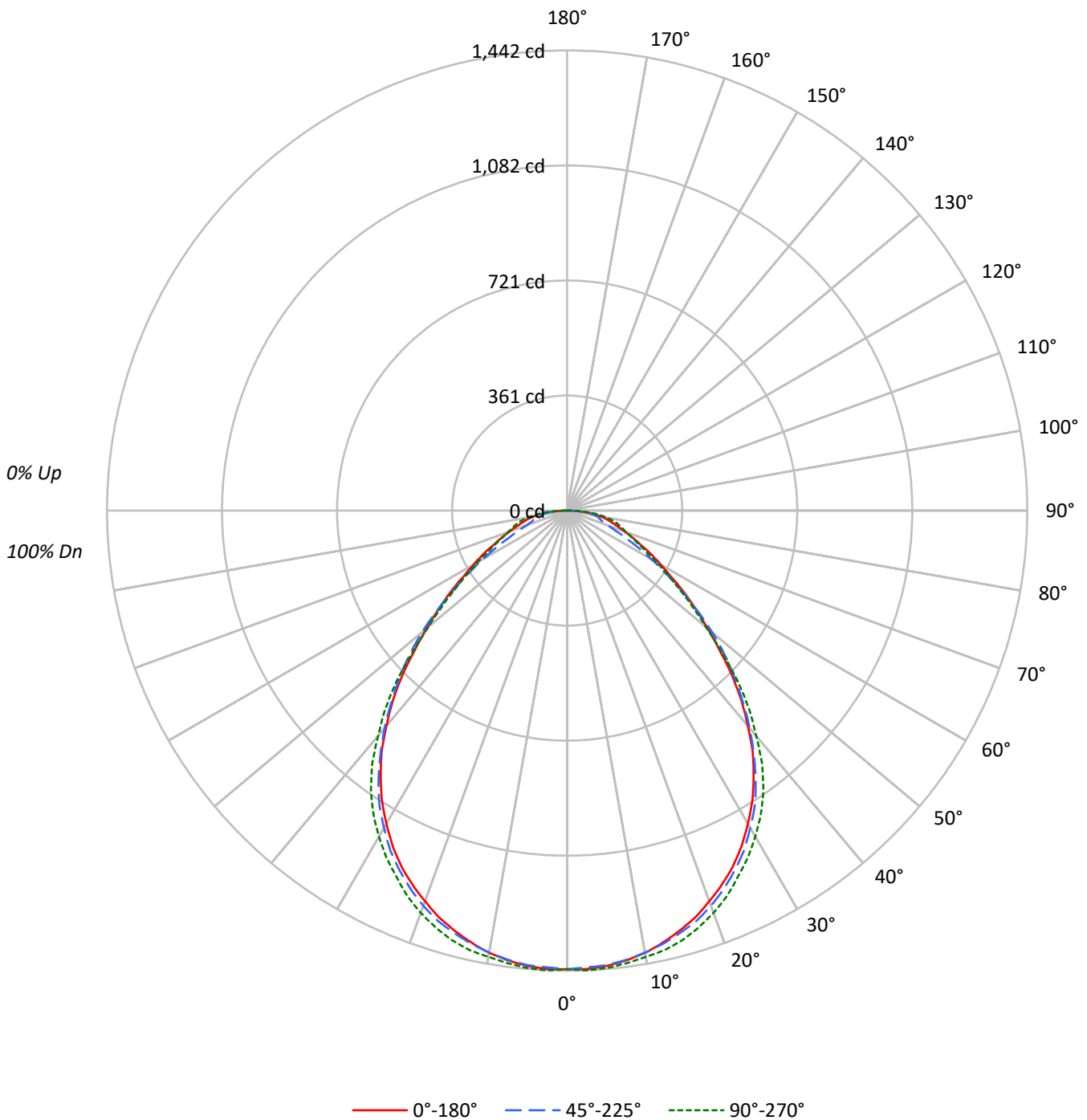
Input Watts (W): 24.645  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3867	3867	3867
5°	3868	3862	3886
10°	3845	3843	3881
15°	3796	3816	3884
20°	3731	3775	3841
25°	3651	3692	3760
30°	3519	3567	3664
35°	3347	3385	3522
40°	3094	3127	3237
45°	2779	2829	2874
50°	2403	2488	2378
55°	2097	2042	2015
60°	1816	1635	1745
65°	1622	1283	1567
70°	1505	1063	1545
75°	1503	1124	1716
80°	1663	1415	1936
85°	1735	1535	2186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.0	4.3
10°-20°	387.3	12.3
20°-30°	572.8	18.3
30°-40°	646.4	20.6
40°-50°	569.9	18.2
50°-60°	390.9	12.5
60°-70°	230.7	7.4
70°-80°	144.0	4.6
80°-90°	60.0	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°	1096.2	34.9
0°-40°	1742.6	55.5
0°-60°	2703.4	86.1
0°-90°	3138.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3138.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1437	1437	1437	1437	1437	
5°	1432	1429	1430	1435	1439	136
15°	1363	1364	1370	1387	1394	384
25°	1230	1234	1244	1260	1266	565
35°	1019	1027	1030	1055	1072	635
45°	730	734	743	748	755	561
55°	447	436	435	421	429	401
65°	255	224	202	233	246	257
75°	145	130	108	151	165	155
85°	56	53	50	65	71	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1437.1	1437.1	1437.1	1437.1	1437.1
2.5°	1437.8	1434.2	1432.7	1438.6	1442.2
5°	1432.0	1429.1	1429.8	1434.9	1438.6
7.5°	1421.8	1419.6	1419.6	1426.9	1430.5
10°	1407.2	1406.4	1406.4	1415.2	1420.3
12.5°	1386.7	1387.4	1390.4	1402.0	1410.8
15°	1362.6	1364.1	1369.9	1386.7	1394.0
17.5°	1336.3	1336.3	1348.0	1361.1	1369.9
20°	1302.7	1304.9	1318.1	1332.7	1341.4
22.5°	1268.4	1272.1	1283.0	1299.8	1307.8
25°	1229.7	1234.1	1243.6	1259.6	1266.2
27.5°	1184.4	1190.3	1200.5	1212.2	1226.1
30°	1132.6	1141.3	1147.9	1164.0	1179.3
32.5°	1080.0	1088.0	1095.3	1112.1	1129.7
35°	1018.7	1027.4	1030.4	1055.2	1072.0
37.5°	955.9	959.5	961.0	985.8	1004.1
40°	880.7	888.0	890.1	909.9	921.5
42.5°	808.4	811.3	815.7	830.3	844.1
45°	730.2	733.9	743.4	747.8	755.1
47.5°	648.4	659.4	670.4	656.5	657.2
50°	574.0	582.7	594.4	568.1	568.1
52.5°	507.5	511.9	512.6	490.7	495.1
55°	446.9	435.9	435.2	420.6	429.4
57.5°	386.3	371.7	366.6	362.2	372.4
60°	337.4	311.1	303.8	310.3	324.2
62.5°	297.2	263.6	249.7	266.5	278.9
65°	254.8	224.2	201.5	232.9	246.1
67.5°	222.0	192.8	163.6	208.1	217.6
70°	191.3	168.7	135.1	189.1	196.4
72.5°	166.5	149.0	116.8	170.9	179.6
75°	144.6	130.0	108.1	151.2	165.0
77.5°	127.1	111.0	100.8	130.7	147.5
80°	107.3	91.3	91.3	109.5	124.9
82.5°	84.7	71.6	73.8	89.1	100.0
85°	56.2	52.6	49.7	65.0	70.8
87.5°	28.5	29.2	26.3	33.6	34.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)