

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: P291984

Luminaire Tested: **22GR-LD5-28-F125-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291984  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33295)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-28-F125-UNV-L82765-W2A1-U-3500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2850.0 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

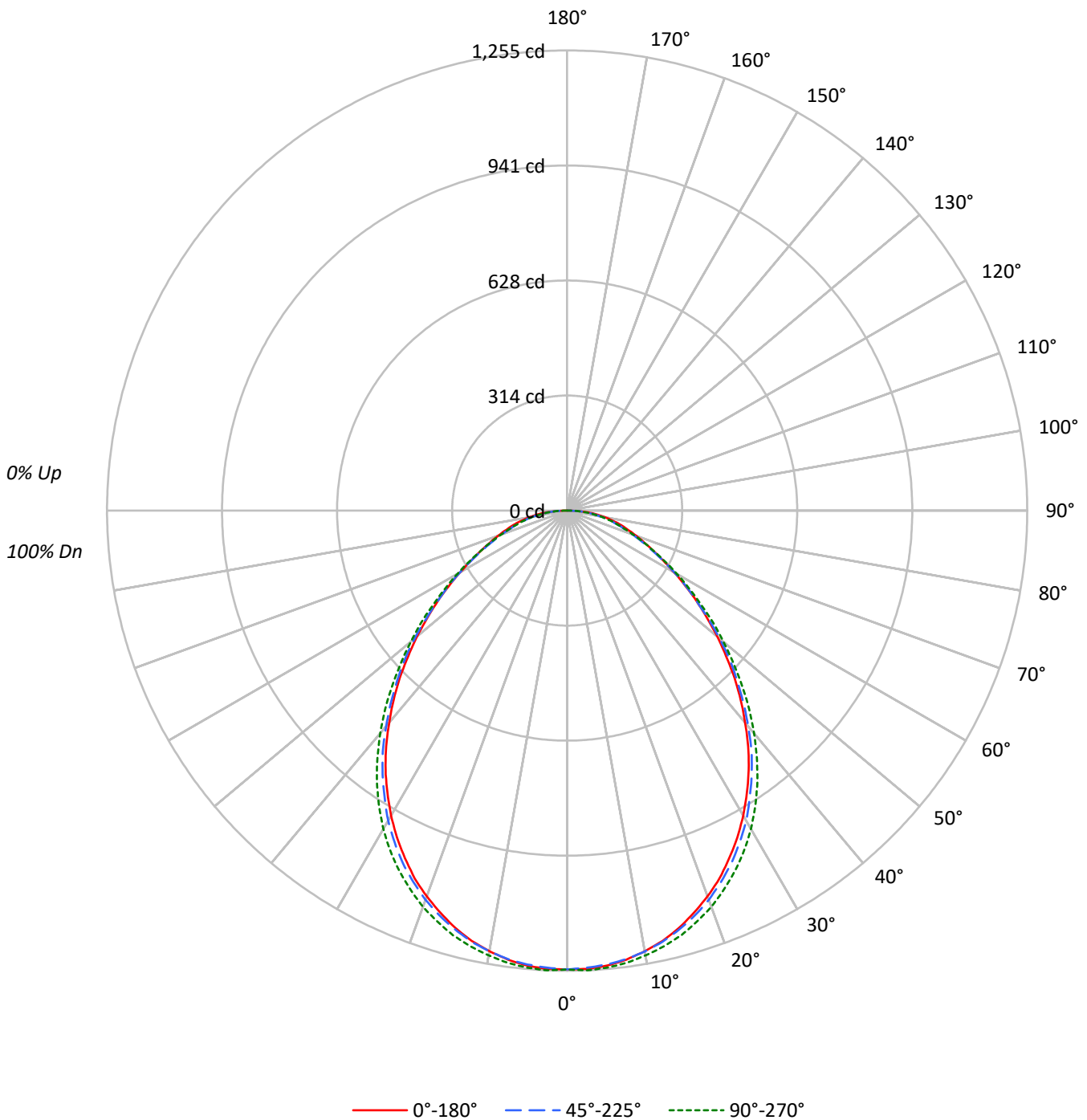
Input Watts (W): 22.134  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	62					62			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54					54			
5	78	66	58	52	76	65	57	51	63	56	51	61	55	50	59	54	50	48					48			
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42					42			
7	68	55	46	41	66	54	46	40	53	45	40	51	45	40	50	44	40	38					38			
8	63	50	42	36	62	50	42	36	48	41	36	47	41	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31					31			
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28					28			

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

	0°	45°	90°
0°	3367	3367	3367
5°	3365	3357	3380
10°	3334	3336	3366
15°	3283	3294	3342
20°	3206	3235	3293
25°	3106	3149	3218
30°	2984	3035	3115
35°	2837	2883	2972
40°	2653	2697	2785
45°	2456	2494	2567
50°	2237	2273	2331
55°	2020	2026	2085
60°	1812	1819	1862
65°	1650	1617	1655
70°	1571	1483	1509
75°	1581	1430	1437
80°	1640	1444	1435
85°	1797	1531	1451



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.2	4.1
10°-20°	333.9	11.7
20°-30°	488.7	17.1
30°-40°	549.5	19.3
40°-50°	506.7	17.8
50°-60°	390.6	13.7
60°-70°	257.7	9.0
70°-80°	150.0	5.3
80°-90°	54.6	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°	940.8	33.0
0°-40°	1490.3	52.3
0°-60°	2387.6	83.8
0°-90°	2850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2850.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1246	1243	1243	1248	1251	118
15°	1178	1178	1182	1193	1200	332
25°	1046	1052	1061	1075	1084	481
35°	864	868	878	895	905	538
45°	645	646	655	669	674	497
55°	430	430	432	439	444	386
65°	259	258	254	256	260	260
75°	152	146	138	135	138	160
85°	58	58	50	46	47	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1251.2	1251.2	1251.2	1251.2	1251.2
2.5°	1251.2	1248.5	1247.9	1252.5	1255.1
5°	1245.9	1243.2	1242.6	1248.5	1251.2
7.5°	1235.3	1233.3	1234.0	1240.6	1243.9
10°	1220.1	1219.4	1220.7	1228.0	1232.0
12.5°	1202.2	1201.6	1204.2	1212.1	1217.4
15°	1178.4	1178.4	1182.4	1193.0	1199.6
17.5°	1150.0	1152.0	1157.9	1168.5	1175.8
20°	1119.6	1121.5	1129.5	1141.4	1150.0
22.5°	1085.8	1088.5	1096.4	1111.0	1118.2
25°	1046.2	1051.5	1060.7	1075.3	1083.9
27.5°	1005.2	1011.1	1019.7	1037.6	1045.5
30°	960.2	964.2	976.7	993.3	1002.5
32.5°	912.6	916.5	927.1	947.0	954.9
35°	863.6	867.6	877.5	895.4	904.6
37.5°	810.7	814.0	826.0	839.8	849.8
40°	755.2	759.8	767.8	784.3	792.9
42.5°	701.0	703.0	711.5	728.1	734.7
45°	645.4	646.1	655.3	668.6	674.5
47.5°	587.9	589.2	600.5	608.4	614.3
50°	534.3	535.0	542.9	550.2	556.8
52.5°	480.8	480.8	484.7	492.7	501.3
55°	430.5	429.8	431.8	439.1	444.4
57.5°	382.9	382.2	384.9	389.5	393.5
60°	336.6	335.3	337.9	340.6	345.9
62.5°	295.6	296.9	293.6	297.6	301.5
65°	259.2	257.9	253.9	255.9	259.9
67.5°	228.1	226.2	219.5	220.9	225.5
70°	199.7	195.7	188.5	188.5	191.8
72.5°	173.9	170.0	160.7	161.4	162.7
75°	152.1	145.5	137.5	134.9	138.2
77.5°	128.3	123.0	115.7	113.7	115.1
80°	105.8	101.8	93.2	90.6	92.6
82.5°	84.0	80.7	70.8	68.8	69.4
85°	58.2	57.5	49.6	45.6	47.0
87.5°	31.1	31.7	25.8	23.1	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)