

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: P294866

Luminaire Tested: **22CZ2-44-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P294866  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44-HRP-UNV-L950-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS  
Light Source: (98) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

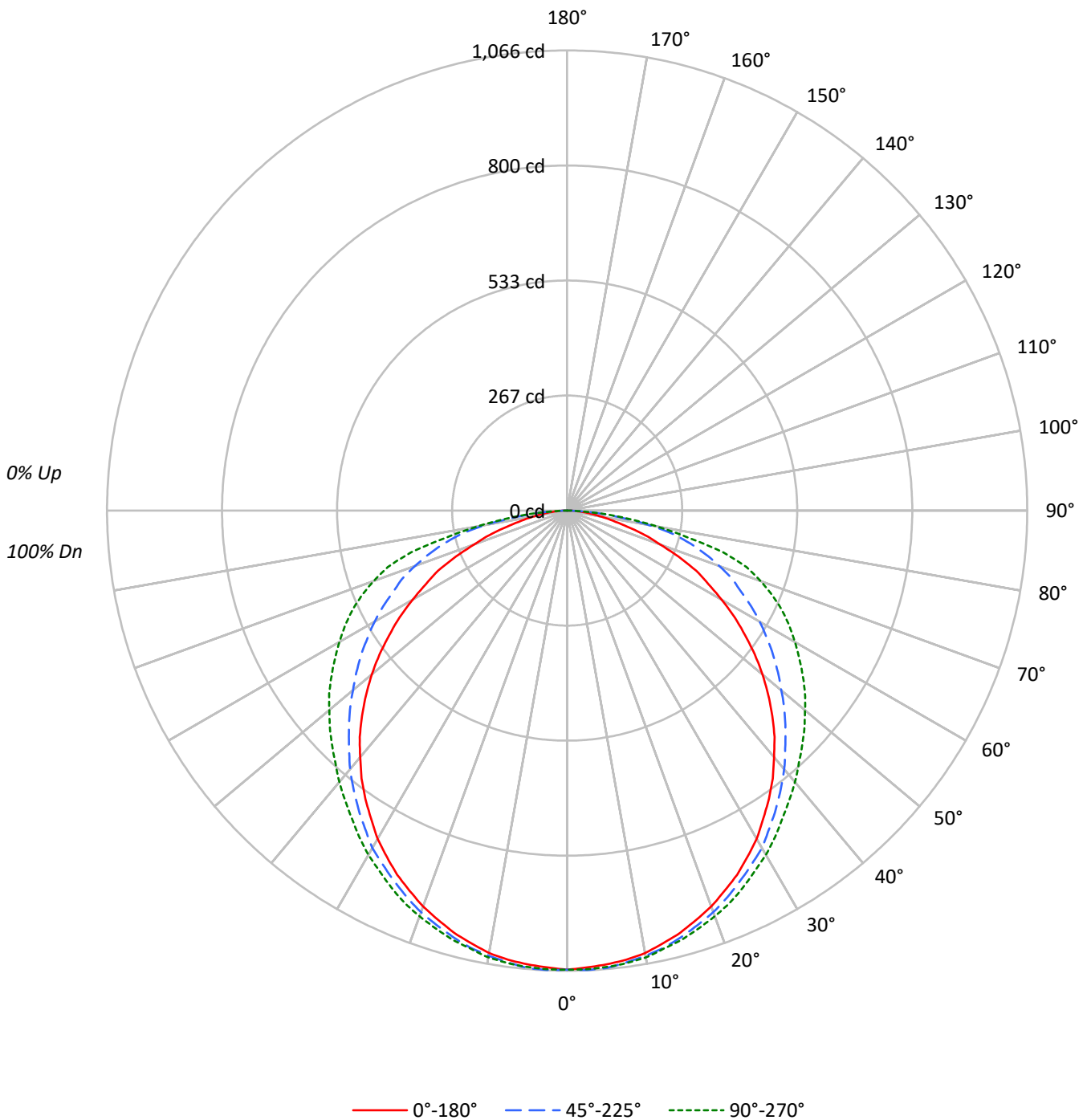
Lumens per Lamp: N/A  
Luminaire Lumens: 3229.6 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 42.7  
Input Voltage (V): NR  
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2862	2862	2862
5°	2851	2873	2867
10°	2845	2861	2872
15°	2821	2849	2866
20°	2795	2835	2865
25°	2764	2813	2861
30°	2728	2804	2861
35°	2677	2771	2858
40°	2619	2748	2884
45°	2559	2721	2931
50°	2473	2712	3011
55°	2361	2734	3126
60°	2226	2774	3278
65°	2101	2828	3503
70°	1795	2950	3751
75°	1503	3071	3898
80°	1232	2968	3251
85°	1068	2201	2390



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.8	3.1
10°-20°	288.3	8.9
20°-30°	436.9	13.5
30°-40°	527.6	16.3
40°-50°	554.4	17.2
50°-60°	521.6	16.2
60°-70°	434.9	13.5
70°-80°	288.2	8.9
80°-90°	76.8	2.4
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°	826.0	25.6
0°-40°	1353.6	41.9
0°-60°	2429.7	75.2
0°-90°	3229.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3229.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1055	1057	1064	1064	1061	100
15°	1012	1017	1023	1027	1029	285
25°	931	937	947	960	964	429
35°	815	823	843	862	870	510
45°	672	682	715	752	770	518
55°	503	526	583	642	666	450
65°	330	359	444	518	550	321
75°	145	202	295	356	375	157
85°	35	53	71	77	77	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.5	1063.5	1063.5	1063.5	1063.5
2.5°	1059.4	1061.4	1065.5	1065.5	1063.5
5°	1055.3	1057.3	1063.5	1063.5	1061.4
7.5°	1049.2	1051.2	1055.3	1059.4	1057.3
10°	1041.0	1043.1	1047.2	1051.2	1051.2
12.5°	1026.8	1028.8	1037.0	1039.0	1039.0
15°	1012.5	1016.6	1022.7	1026.8	1028.8
17.5°	994.2	998.3	1006.4	1014.6	1014.6
20°	975.9	979.9	990.1	998.3	1000.3
22.5°	953.4	959.6	969.7	979.9	984.0
25°	931.0	937.1	947.3	959.6	963.6
27.5°	904.5	910.7	924.9	939.2	941.2
30°	878.1	884.2	902.5	914.7	920.8
32.5°	845.5	853.6	872.0	890.3	896.4
35°	814.9	823.1	843.4	861.8	869.9
37.5°	782.3	790.5	812.9	835.3	845.5
40°	745.6	755.8	782.3	806.8	821.0
42.5°	711.0	721.2	747.7	780.3	794.5
45°	672.3	682.5	715.1	751.8	770.1
47.5°	631.6	643.8	682.5	727.3	745.6
50°	590.8	605.1	647.9	698.8	719.2
52.5°	548.0	566.4	615.3	670.3	694.7
55°	503.2	525.6	582.7	641.7	666.2
57.5°	460.4	480.8	548.0	611.2	637.7
60°	413.6	440.1	515.4	580.6	609.1
62.5°	368.7	397.3	480.8	550.1	580.6
65°	330.0	358.6	444.1	517.5	550.1
67.5°	279.1	317.8	413.6	482.8	515.4
70°	228.2	281.1	374.9	446.2	476.7
72.5°	189.5	240.4	336.1	407.5	436.0
75°	144.6	201.7	295.4	356.5	374.9
77.5°	108.0	167.1	252.6	283.2	285.2
80°	79.5	128.3	191.5	201.7	209.8
82.5°	55.0	89.6	124.3	136.5	140.6
85°	34.6	53.0	71.3	77.4	77.4
87.5°	18.3	20.4	24.4	24.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)