

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: P475118

Luminaire Tested: **22CZ2-39HE-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475118
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-HRP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

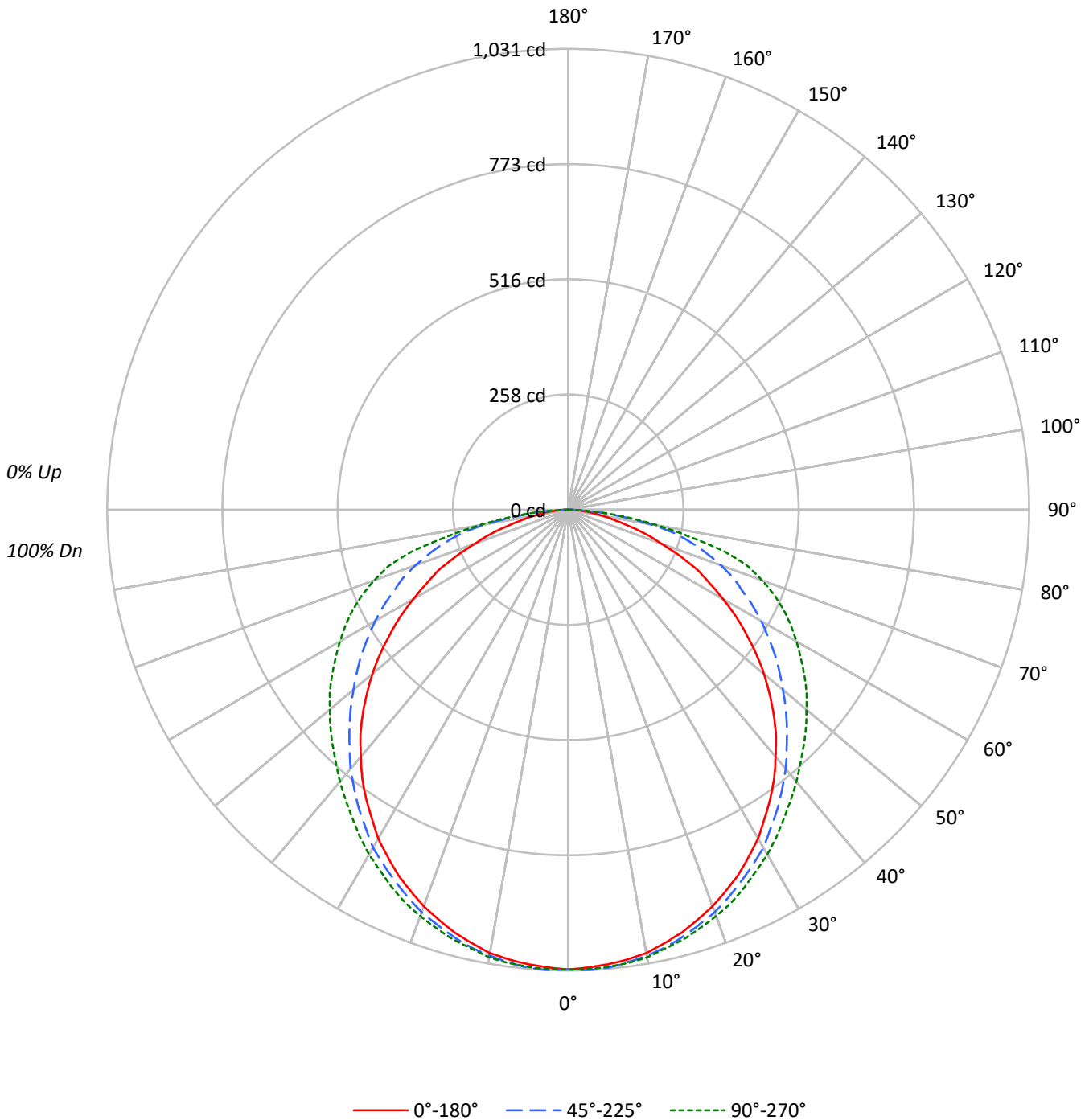
Lumens per Lamp: N/A
Luminaire Lumens: 3124.4 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
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	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°	2768	2768	2768
5°	2758	2779	2774
10°	2752	2768	2779
15°	2729	2756	2773
20°	2704	2743	2771
25°	2675	2721	2768
30°	2639	2713	2768
35°	2590	2681	2765
40°	2534	2659	2790
45°	2475	2633	2835
50°	2393	2624	2912
55°	2284	2645	3024
60°	2153	2683	3172
65°	2033	2736	3389
70°	1737	2854	3629
75°	1456	2973	3771
80°	1193	2870	3146
85°	1031	2127	2313



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.5	3.1
10°-20°	278.9	8.9
20°-30°	422.7	13.5
30°-40°	510.4	16.3
40°-50°	536.3	17.2
50°-60°	504.6	16.2
60°-70°	420.8	13.5
70°-80°	278.8	8.9
80°-90°	74.3	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°	799.1	25.6
0°-40°	1309.6	41.9
0°-60°	2350.5	75.2
0°-90°	3124.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3124.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	1021	1023	1029	1029	1027	97
15°	980	984	989	993	995	276
25°	901	907	916	928	932	415
35°	788	796	816	834	842	493
45°	650	660	692	727	745	501
55°	487	509	564	621	644	435
65°	319	347	430	500	532	311
75°	140	195	286	345	363	152
85°	33	51	69	75	75	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1028.8	1028.8	1028.8	1028.8	1028.8
2.5°	1024.9	1026.8	1030.9	1030.9	1028.8
5°	1020.9	1022.8	1028.8	1028.8	1026.8
7.5°	1015.0	1017.1	1020.9	1024.9	1022.8
10°	1007.2	1009.1	1013.1	1017.1	1017.1
12.5°	993.4	995.3	1003.2	1005.3	1005.3
15°	979.5	983.5	989.4	993.4	995.3
17.5°	961.9	965.7	973.6	981.6	981.6
20°	944.2	948.0	957.9	965.7	967.6
22.5°	922.4	928.3	938.2	948.0	952.0
25°	900.8	906.7	916.5	928.3	932.3
27.5°	875.0	880.9	894.9	908.6	910.5
30°	849.4	855.4	873.1	885.0	890.9
32.5°	817.9	825.8	843.5	861.3	867.2
35°	788.3	796.3	816.0	833.8	841.6
37.5°	756.8	764.6	786.4	808.2	817.9
40°	721.3	731.2	756.8	780.5	794.2
42.5°	687.9	697.8	723.4	754.9	768.7
45°	650.4	660.2	691.9	727.2	745.0
47.5°	610.9	622.8	660.2	703.7	721.3
50°	571.6	585.3	626.8	676.0	695.7
52.5°	530.1	547.9	595.3	648.5	672.0
55°	486.8	508.6	563.7	620.8	644.5
57.5°	445.3	465.2	530.1	591.2	616.8
60°	400.1	425.7	498.6	561.6	589.3
62.5°	356.7	384.4	465.2	532.2	561.6
65°	319.3	346.8	429.7	500.5	532.2
67.5°	270.0	307.5	400.1	467.1	498.6
70°	220.8	271.9	362.7	431.6	461.2
72.5°	183.3	232.6	325.2	394.2	421.9
75°	140.0	195.2	285.9	344.9	362.7
77.5°	104.5	161.6	244.4	274.0	276.0
80°	77.0	124.1	185.2	195.2	203.0
82.5°	53.3	86.7	120.3	132.0	136.0
85°	33.4	51.2	68.9	74.9	74.9
87.5°	17.8	19.7	23.7	23.7	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)