

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: P475009

Luminaire Tested: **22CZ2-50VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475009
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-RDP-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3289.1 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

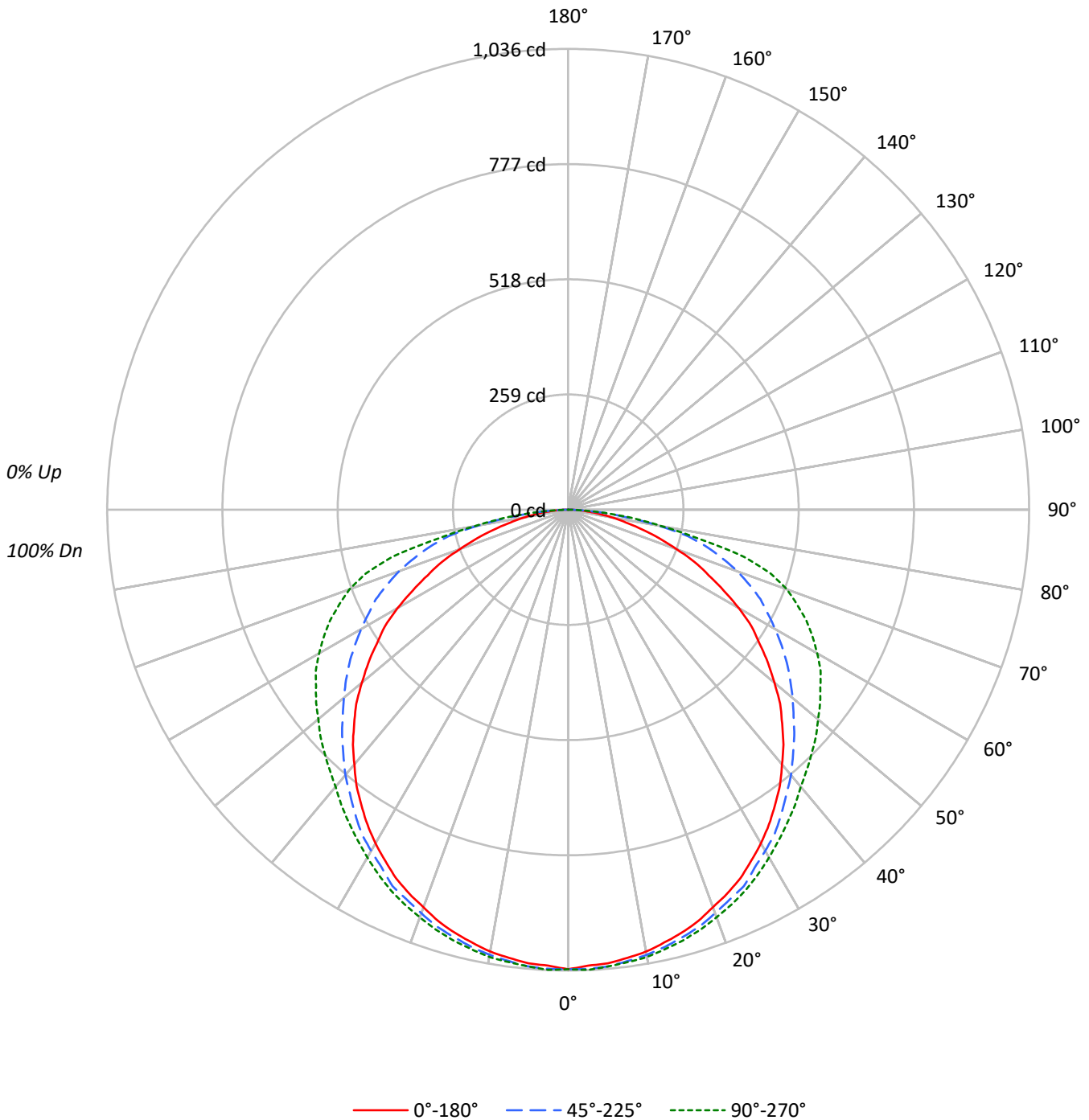
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2780	2780	2780
5°	2765	2784	2784
10°	2757	2777	2790
15°	2744	2770	2790
20°	2723	2764	2793
25°	2716	2773	2802
30°	2692	2751	2805
35°	2663	2742	2822
40°	2627	2736	2856
45°	2587	2735	2946
50°	2532	2755	3069
55°	2464	2815	3246
60°	2384	2891	3477
65°	2218	3036	3760
70°	2037	3180	4113
75°	1787	3345	4252
80°	1539	3186	3338
85°	1343	2316	2538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.0
10°-20°	280.6	8.5
20°-30°	428.1	13.0
30°-40°	522.7	15.9
40°-50°	558.9	17.0
50°-60°	539.5	16.4
60°-70°	464.4	14.1
70°-80°	314.2	9.6
80°-90°	82.9	2.5
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°	806.5	24.5
0°-40°	1329.2	40.4
0°-60°	2427.5	73.8
0°-90°	3289.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3289.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1033	1033	1033	1033	1033	
5°	1024	1026	1031	1031	1031	97
15°	985	987	994	999	1002	278
25°	915	919	934	939	944	421
35°	810	818	835	852	859	507
45°	680	692	719	755	774	525
55°	525	542	600	660	692	471
65°	348	382	477	552	590	347
75°	172	227	322	387	409	184
85°	44	61	75	77	82	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1033.1	1033.1	1033.1	1033.1	1033.1
2.5°	1025.9	1028.3	1033.1	1033.1	1035.5
5°	1023.5	1025.9	1030.7	1030.7	1030.7
7.5°	1016.3	1018.7	1023.5	1025.9	1025.9
10°	1008.8	1011.5	1016.3	1018.7	1021.1
12.5°	996.8	999.2	1006.4	1011.5	1011.5
15°	984.8	987.2	994.4	999.2	1001.6
17.5°	970.1	975.2	982.4	987.2	989.6
20°	950.9	955.7	965.3	972.8	975.2
22.5°	934.0	938.9	948.5	955.7	960.5
25°	914.6	919.4	934.0	938.9	943.7
27.5°	890.3	895.3	907.4	917.0	924.2
30°	866.2	871.1	885.5	897.7	902.6
32.5°	839.6	846.8	863.8	873.5	880.7
35°	810.5	817.7	834.8	851.6	859.0
37.5°	781.6	788.8	805.7	827.5	837.2
40°	747.7	757.3	779.0	808.1	812.9
42.5°	716.2	728.2	747.7	781.6	793.6
45°	679.9	691.9	718.6	754.9	774.2
47.5°	646.0	658.0	687.1	730.6	754.9
50°	604.9	621.7	658.0	709.0	733.1
52.5°	566.2	580.6	629.2	684.7	713.8
55°	525.1	541.9	600.1	660.4	691.9
57.5°	488.8	503.2	568.6	636.4	672.7
60°	442.9	462.1	537.1	609.7	646.0
62.5°	394.3	423.4	505.6	580.6	619.3
65°	348.4	382.3	476.8	551.5	590.5
67.5°	307.3	343.6	440.5	520.3	556.6
70°	258.9	304.9	404.2	481.6	522.7
72.5°	215.4	266.1	363.0	440.5	476.8
75°	171.9	227.4	321.7	387.1	409.0
77.5°	133.0	186.3	275.8	295.2	297.6
80°	99.3	147.6	205.6	208.0	215.4
82.5°	67.8	104.1	133.0	145.2	147.6
85°	43.5	60.6	75.0	77.4	82.2
87.5°	19.5	21.9	26.7	24.3	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)