

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: P475010

Luminaire Tested: **22CZ2-55VHE-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475010  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-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: 3598.2 lumens  
Efficiency: N/A  
Efficacy: 93.5 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

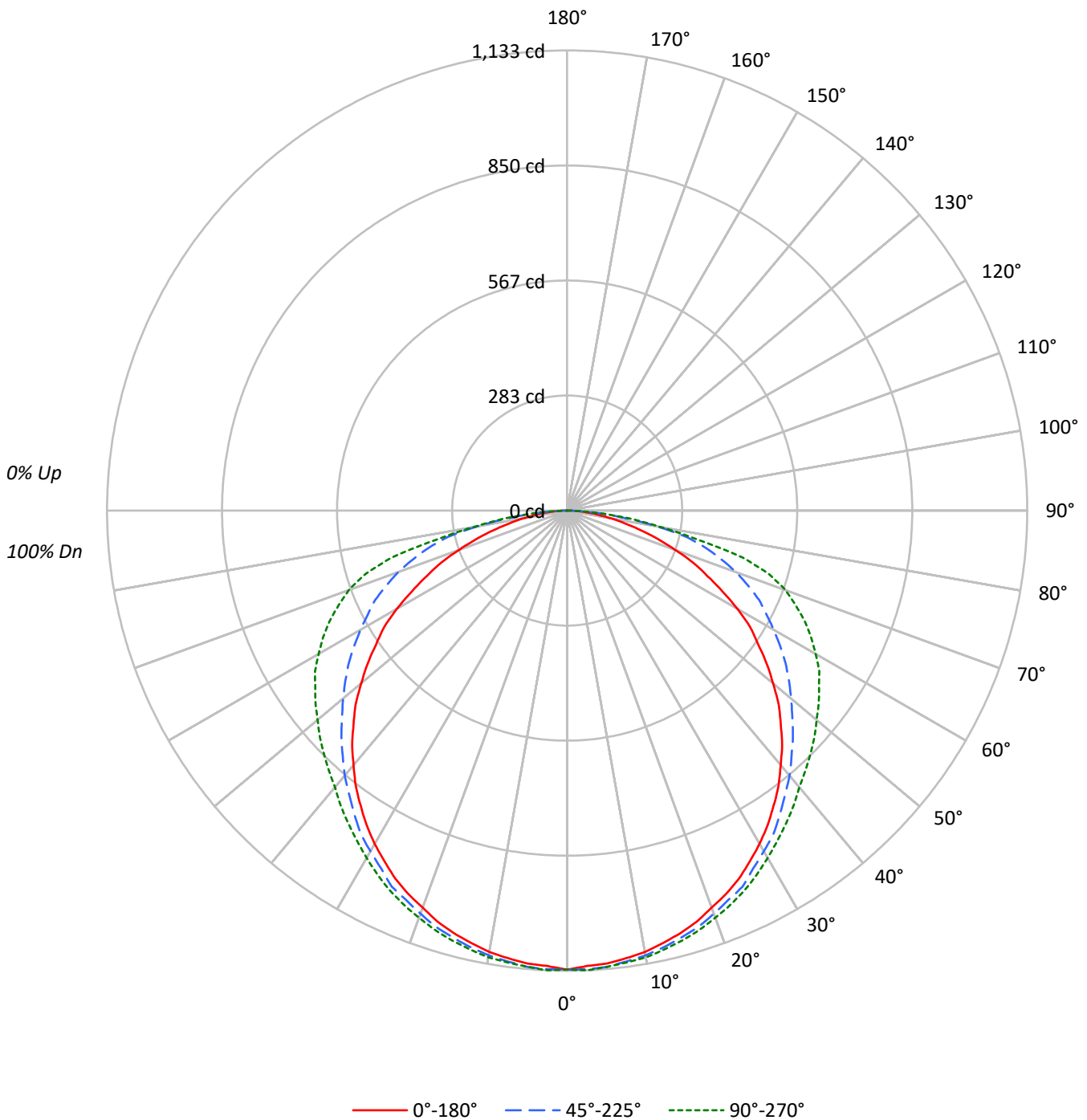
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3041	3041	3041
5°	3025	3046	3046
10°	3016	3038	3052
15°	3001	3031	3053
20°	2979	3024	3055
25°	2971	3034	3065
30°	2944	3010	3068
35°	2913	3000	3087
40°	2873	2994	3124
45°	2831	2992	3223
50°	2770	3014	3357
55°	2695	3080	3552
60°	2608	3162	3803
65°	2427	3321	4113
70°	2229	3478	4499
75°	1956	3659	4652
80°	1683	3485	3653
85°	1470	2535	2779



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.9	3.0
10°-20°	307.0	8.5
20°-30°	468.3	13.0
30°-40°	571.8	15.9
40°-50°	611.4	17.0
50°-60°	590.2	16.4
60°-70°	508.0	14.1
70°-80°	343.8	9.6
80°-90°	90.7	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°	882.2	24.5
0°-40°	1454.1	40.4
0°-60°	2655.7	73.8
0°-90°	3598.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3598.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1120	1122	1128	1128	1128	106
15°	1077	1080	1088	1093	1096	304
25°	1000	1006	1022	1027	1032	460
35°	887	894	913	932	940	555
45°	744	757	786	826	847	574
55°	574	593	656	722	757	515
65°	381	418	522	603	646	379
75°	188	249	352	424	447	202
85°	48	66	82	85	90	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1130.2	1130.2	1130.2	1130.2	1130.2
2.5°	1122.3	1124.9	1130.2	1130.2	1132.8
5°	1119.7	1122.3	1127.5	1127.5	1127.5
7.5°	1111.8	1114.4	1119.7	1122.3	1122.3
10°	1103.6	1106.5	1111.8	1114.4	1117.0
12.5°	1090.5	1093.1	1101.0	1106.5	1106.5
15°	1077.3	1079.9	1087.8	1093.1	1095.7
17.5°	1061.3	1066.8	1074.7	1079.9	1082.6
20°	1040.2	1045.5	1056.0	1064.2	1066.8
22.5°	1021.8	1027.1	1037.6	1045.5	1050.7
25°	1000.5	1005.8	1021.8	1027.1	1032.3
27.5°	973.9	979.5	992.6	1003.1	1011.0
30°	947.6	952.9	968.7	982.1	987.4
32.5°	918.4	926.3	945.0	955.5	963.4
35°	886.6	894.5	913.2	931.6	939.8
37.5°	855.1	863.0	881.4	905.3	915.8
40°	818.0	828.5	852.2	884.0	889.3
42.5°	783.5	796.7	818.0	855.1	868.2
45°	743.8	757.0	786.2	825.9	846.9
47.5°	706.7	719.9	751.7	799.3	825.9
50°	661.7	680.2	719.9	775.6	801.9
52.5°	619.4	635.2	688.3	749.1	780.9
55°	574.4	592.8	656.5	722.5	757.0
57.5°	534.7	550.5	622.0	696.2	735.9
60°	484.5	505.5	587.6	667.0	706.7
62.5°	431.3	463.2	553.1	635.2	677.5
65°	381.1	418.2	521.6	603.4	646.0
67.5°	336.1	375.8	481.8	569.2	608.9
70°	283.3	333.5	442.1	526.8	571.8
72.5°	235.7	291.2	397.2	481.8	521.6
75°	188.1	248.8	351.9	423.5	447.4
77.5°	145.4	203.8	301.7	323.0	325.6
80°	108.6	161.5	224.9	227.5	235.7
82.5°	74.2	113.9	145.4	158.9	161.5
85°	47.6	66.3	82.1	84.7	90.0
87.5°	21.3	23.9	29.2	26.6	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)