

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: P474902

Luminaire Tested: **22CZ2-95VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474902  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-95VHE-S-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9353.4 lumens  
Efficiency: N/A  
Efficacy: 131.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

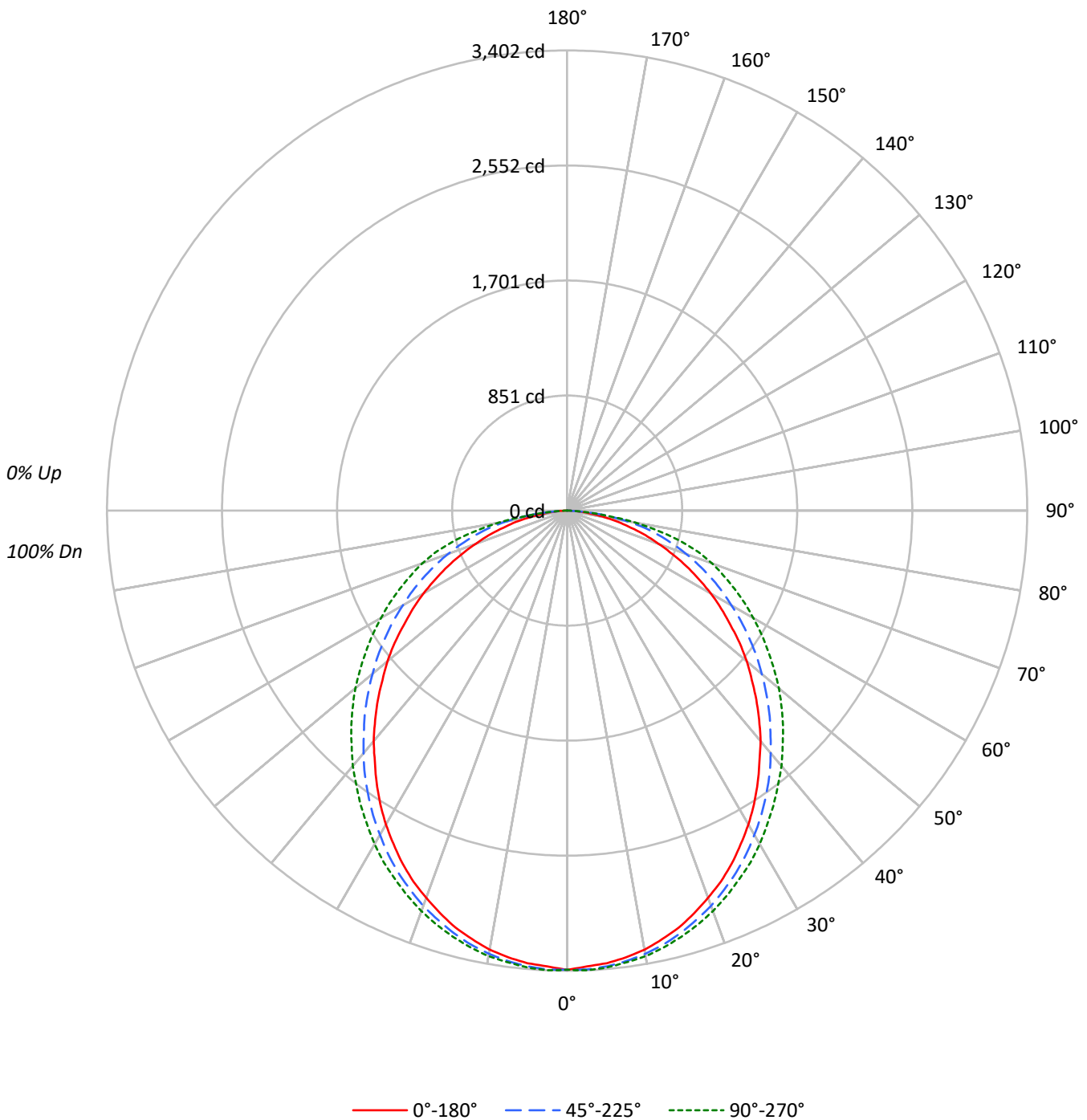
Input Watts (W): 71.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	9137	9137	9137
5°	9074	9135	9159
10°	9005	9092	9142
15°	8891	9011	9087
20°	8725	8906	9023
25°	8549	8771	8932
30°	8327	8602	8848
35°	8068	8425	8737
40°	7816	8222	8659
45°	7529	8045	8588
50°	7258	7865	8557
55°	6913	7710	8517
60°	6603	7553	8552
65°	6197	7466	8676
70°	5663	7373	8958
75°	5083	7320	8966
80°	4279	6910	7962
85°	3214	4684	4332



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.7	3.4
10°-20°	910.7	9.7
20°-30°	1357.9	14.5
30°-40°	1602.2	17.1
40°-50°	1632.4	17.5
50°-60°	1472.2	15.7
60°-70°	1156.2	12.4
70°-80°	722.8	7.7
80°-90°	178.2	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°	2589.3	27.7
0°-40°	4191.5	44.8
0°-60°	7296.2	78.0
0°-90°	9353.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9353.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3395	3395	3395	3395	3395	
5°	3359	3366	3382	3388	3391	319
15°	3192	3203	3235	3257	3262	899
25°	2879	2895	2954	2997	3008	1325
35°	2456	2490	2565	2635	2660	1536
45°	1978	2012	2114	2216	2257	1526
55°	1474	1521	1643	1770	1815	1322
65°	973	1025	1172	1304	1363	961
75°	489	557	704	824	862	523
85°	104	134	152	149	140	127
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3395.3	3395.3	3395.3	3395.3	3395.3
2.5°	3372.6	3379.4	3395.3	3402.1	3402.1
5°	3359.0	3365.8	3381.7	3388.5	3390.7
7.5°	3331.9	3340.9	3359.0	3368.1	3368.1
10°	3295.7	3307.0	3327.4	3340.9	3345.5
12.5°	3245.9	3259.5	3286.6	3302.5	3307.0
15°	3191.5	3202.9	3234.6	3257.2	3261.7
17.5°	3121.4	3139.5	3173.4	3202.9	3209.7
20°	3046.7	3067.1	3110.1	3144.0	3150.8
22.5°	2969.7	2985.6	3033.1	3073.8	3082.9
25°	2879.2	2895.0	2953.9	2996.9	3008.2
27.5°	2779.6	2806.8	2865.6	2915.4	2933.5
30°	2680.0	2707.2	2768.3	2827.1	2847.5
32.5°	2571.3	2600.8	2670.9	2732.1	2752.4
35°	2455.9	2489.9	2564.6	2634.7	2659.6
37.5°	2335.9	2374.4	2458.2	2532.9	2560.0
40°	2225.0	2252.2	2340.5	2426.5	2465.0
42.5°	2100.5	2136.8	2225.0	2322.4	2358.6
45°	1978.3	2012.3	2114.1	2216.0	2256.7
47.5°	1851.6	1894.6	1996.4	2109.6	2150.3
50°	1733.8	1770.1	1878.7	1998.7	2043.9
52.5°	1607.1	1645.6	1763.3	1887.8	1928.5
55°	1473.5	1521.1	1643.3	1770.1	1815.3
57.5°	1351.3	1396.6	1525.6	1656.9	1704.4
60°	1226.8	1272.1	1403.4	1536.9	1589.0
62.5°	1095.5	1147.6	1290.2	1419.2	1478.1
65°	973.3	1025.4	1172.5	1303.8	1362.6
67.5°	844.3	905.4	1052.5	1190.6	1249.5
70°	719.8	792.2	937.1	1072.9	1138.5
72.5°	608.9	667.7	819.4	962.0	1016.3
75°	488.9	556.8	704.0	823.9	862.4
77.5°	387.1	445.9	586.2	665.5	690.4
80°	276.1	341.8	445.9	493.4	513.8
82.5°	183.3	237.7	303.3	312.4	307.8
85°	104.1	133.5	151.7	149.4	140.3
87.5°	40.7	45.3	34.0	20.4	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)