

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: P474643

Luminaire Tested: **24CZ2-95VHE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474643
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-SQR-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9066.4 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

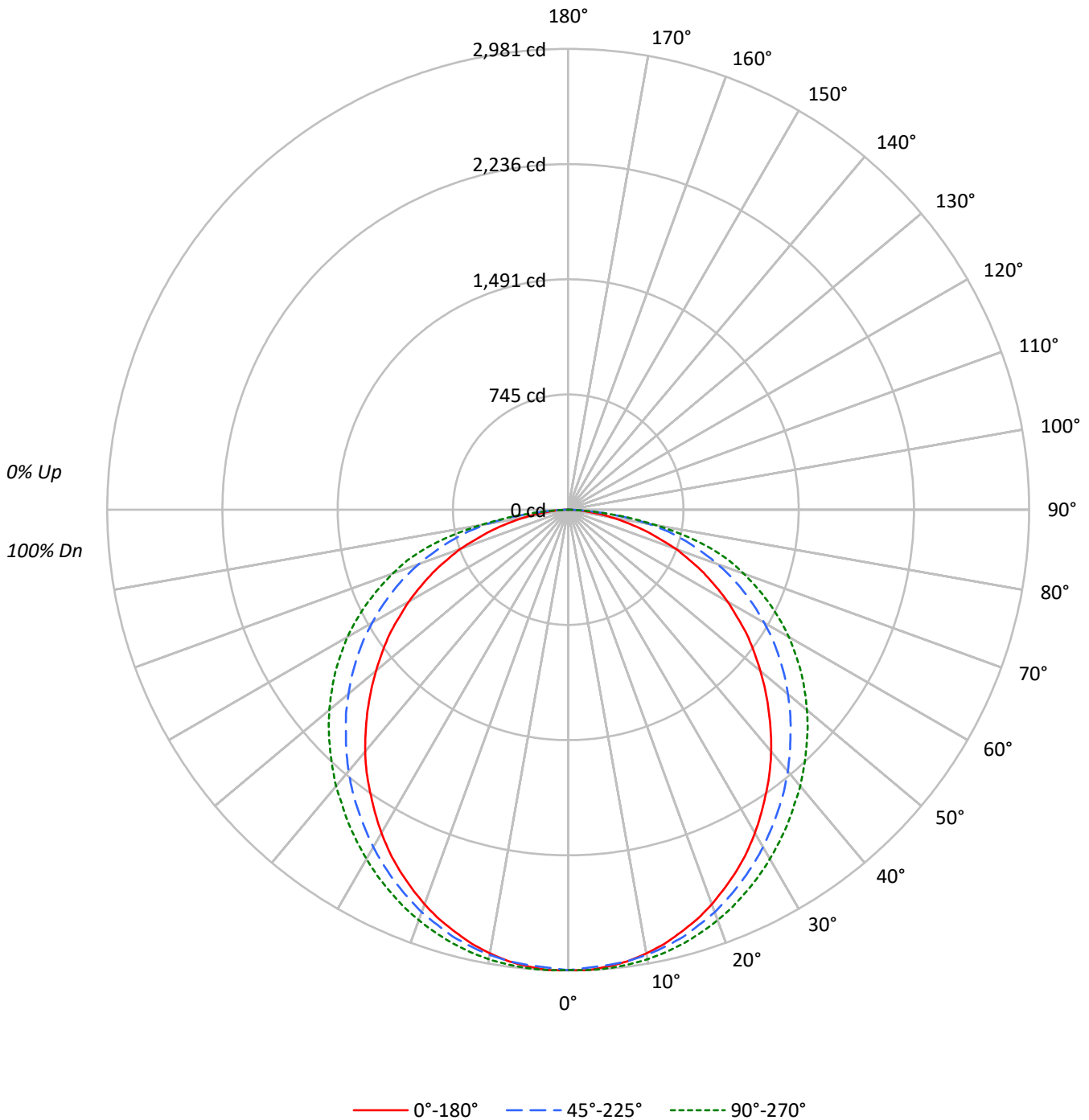
Input Watts (W): 67.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	81	75	84	78	73	80	76	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	53	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°	8014	8014	8014
5°	8013	7990	8044
10°	7963	7991	8070
15°	7877	7974	8082
20°	7777	7935	8092
25°	7651	7879	8094
30°	7503	7831	8106
35°	7333	7785	8136
40°	7174	7759	8202
45°	6978	7739	8291
50°	6792	7762	8441
55°	6632	7815	8630
60°	6408	7873	8871
65°	6152	7969	9140
70°	5835	8080	9504
75°	5226	8193	9819
80°	4400	8215	8911
85°	3264	6215	5857



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.2	3.1
10°-20°	808.8	8.9
20°-30°	1224.4	13.5
30°-40°	1481.1	16.3
40°-50°	1563.4	17.2
50°-60°	1474.3	16.3
60°-70°	1215.5	13.4
70°-80°	797.4	8.8
80°-90°	219.2	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°	2315.4	25.5
0°-40°	3796.5	41.9
0°-60°	6834.3	75.4
0°-90°	9066.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9066.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2978	2978	2978	2978	2978	
5°	2966	2966	2958	2978	2978	282
15°	2827	2843	2862	2896	2901	798
25°	2577	2609	2654	2709	2726	1187
35°	2232	2290	2370	2451	2477	1397
45°	1834	1916	2034	2142	2178	1415
55°	1414	1514	1666	1790	1840	1259
65°	966	1082	1252	1385	1435	954
75°	503	632	788	912	944	531
85°	106	182	201	196	190	131
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2978.0	2978.0	2978.0	2978.0	2978.0
2.5°	2980.9	2978.0	2965.0	2982.4	2980.9
5°	2966.4	2966.4	2957.7	2978.0	2978.0
7.5°	2946.1	2947.6	2944.7	2967.9	2967.9
10°	2914.3	2920.1	2924.4	2950.5	2953.4
12.5°	2876.6	2886.8	2895.5	2927.3	2930.2
15°	2827.4	2843.3	2862.1	2895.5	2901.2
17.5°	2776.7	2795.5	2815.8	2859.2	2866.5
20°	2715.8	2737.6	2770.9	2814.3	2825.9
22.5°	2647.8	2678.2	2712.9	2765.1	2779.6
25°	2576.8	2608.7	2653.6	2708.6	2726.0
27.5°	2500.0	2537.7	2588.4	2652.1	2670.9
30°	2414.6	2458.0	2520.3	2588.4	2608.7
32.5°	2324.8	2375.5	2445.0	2520.3	2543.5
35°	2232.1	2290.0	2369.7	2450.8	2476.8
37.5°	2140.8	2198.7	2292.9	2378.4	2403.0
40°	2042.3	2106.0	2208.9	2300.1	2334.9
42.5°	1938.0	2013.3	2122.0	2223.4	2256.7
45°	1833.7	1916.3	2033.6	2142.3	2178.5
47.5°	1728.0	1819.3	1948.2	2058.2	2100.3
50°	1622.3	1719.3	1854.0	1972.8	2016.2
52.5°	1515.1	1616.5	1762.8	1888.8	1927.9
55°	1413.7	1513.6	1665.7	1790.3	1839.5
57.5°	1296.4	1409.3	1570.1	1696.1	1743.9
60°	1190.6	1300.7	1462.9	1596.2	1648.3
62.5°	1076.2	1189.2	1360.1	1493.4	1544.0
65°	966.1	1082.0	1251.5	1384.7	1435.4
67.5°	847.3	969.0	1142.8	1271.7	1321.0
70°	741.6	856.0	1027.0	1158.8	1208.0
72.5°	612.7	743.1	906.7	1037.1	1090.7
75°	502.6	631.5	788.0	912.5	944.4
77.5°	386.7	515.6	670.6	751.7	773.5
80°	283.9	405.6	530.1	573.6	575.0
82.5°	191.2	298.4	369.4	391.1	388.2
85°	105.7	182.5	201.3	195.5	189.7
87.5°	43.5	60.8	49.2	34.8	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)