

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: P474246

Luminaire Tested: **24CZ2-110VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474246
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-110VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7396.2 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

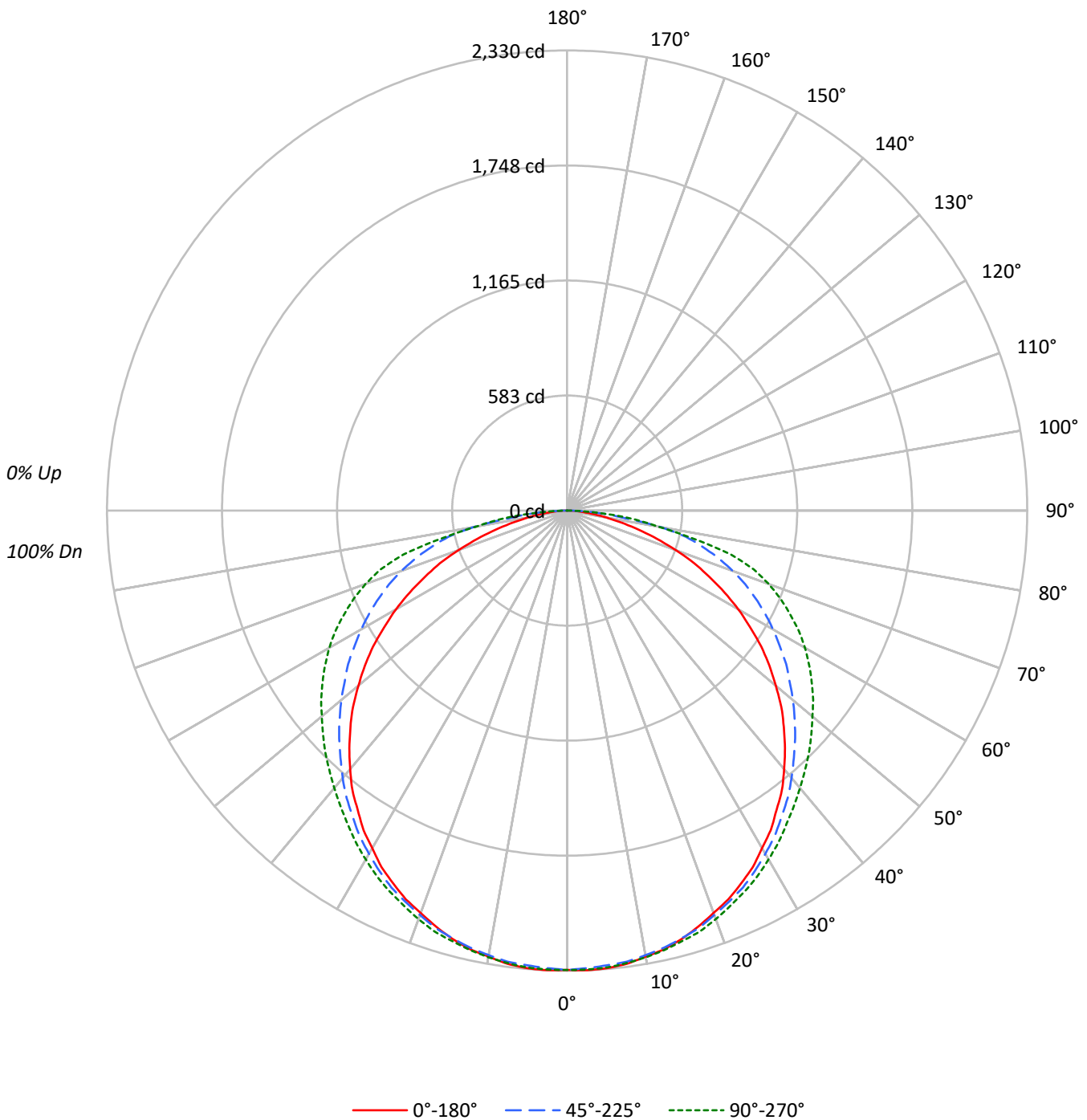
Input Watts (W): 77
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	3130	3130	3130
5°	3142	3122	3137
10°	3133	3123	3138
15°	3128	3122	3143
20°	3105	3120	3152
25°	3094	3126	3159
30°	3066	3118	3169
35°	3037	3109	3181
40°	3003	3106	3222
45°	2953	3107	3295
50°	2887	3126	3394
55°	2814	3175	3546
60°	2696	3238	3742
65°	2523	3351	3971
70°	2294	3508	4271
75°	1944	3700	4463
80°	1536	3723	3609
85°	1133	2833	3174



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.6	3.0
10°-20°	635.0	8.6
20°-30°	971.0	13.1
30°-40°	1187.0	16.0
40°-50°	1265.2	17.1
50°-60°	1209.6	16.4
60°-70°	1024.7	13.9
70°-80°	688.7	9.3
80°-90°	194.3	2.6
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°	1826.7	24.7
0°-40°	3013.7	40.7
0°-60°	5488.5	74.2
0°-90°	7396.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7396.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2326	2326	2326	2326	2326	
5°	2326	2322	2311	2322	2322	221
15°	2245	2245	2242	2260	2256	633
25°	2084	2091	2106	2124	2128	960
35°	1849	1864	1893	1930	1937	1158
45°	1552	1578	1633	1702	1731	1197
55°	1200	1244	1354	1460	1512	1068
65°	792	873	1053	1192	1247	787
75°	374	510	712	833	858	401
85°	73	150	184	198	206	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2326.0	2326.0	2326.0	2326.0	2326.0
2.5°	2329.7	2329.7	2318.7	2326.0	2326.0
5°	2326.0	2322.3	2311.3	2322.3	2322.3
7.5°	2315.0	2311.3	2304.0	2315.0	2311.3
10°	2293.0	2293.0	2285.6	2296.7	2296.7
12.5°	2274.6	2271.0	2267.3	2282.0	2278.3
15°	2245.3	2245.3	2241.6	2259.9	2256.3
17.5°	2208.6	2212.2	2215.9	2230.6	2234.3
20°	2168.2	2175.5	2179.2	2201.2	2201.2
22.5°	2131.5	2135.2	2142.5	2164.5	2164.5
25°	2083.8	2091.1	2105.8	2124.1	2127.8
27.5°	2036.0	2039.7	2058.1	2083.8	2087.4
30°	1973.6	1984.7	2006.7	2036.0	2039.7
32.5°	1918.6	1929.6	1955.3	1984.7	1992.0
35°	1848.8	1863.5	1892.9	1929.6	1936.9
37.5°	1786.4	1797.5	1834.2	1874.5	1885.6
40°	1709.7	1731.4	1768.1	1815.8	1834.2
42.5°	1632.7	1654.7	1698.7	1760.8	1782.8
45°	1551.9	1577.6	1632.7	1702.4	1731.4
47.5°	1471.2	1500.5	1562.9	1643.7	1676.7
50°	1379.4	1416.1	1493.2	1584.9	1621.6
52.5°	1291.3	1335.3	1419.8	1522.5	1570.3
55°	1199.5	1243.6	1353.7	1460.1	1511.5
57.5°	1096.8	1155.5	1276.6	1397.7	1452.8
60°	1001.7	1056.4	1203.2	1335.3	1390.4
62.5°	898.9	972.3	1129.8	1269.3	1324.3
65°	792.5	873.2	1052.7	1192.2	1247.2
67.5°	697.0	785.1	976.0	1115.1	1170.2
70°	583.2	693.4	891.6	1030.7	1085.7
72.5°	476.8	597.9	803.5	939.3	990.7
75°	374.0	509.8	711.7	832.8	858.5
77.5°	279.0	421.7	616.3	667.7	649.3
80°	198.2	337.7	480.5	454.8	465.8
82.5°	128.5	256.9	297.3	337.7	348.3
85°	73.4	150.5	183.5	198.2	205.6
87.5°	33.0	55.1	73.4	73.4	69.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)