

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: P474297

Luminaire Tested: **24CZ2-115VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474297
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-115VHE-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7858.4 lumens
Efficiency: N/A
Efficacy: 97.5 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

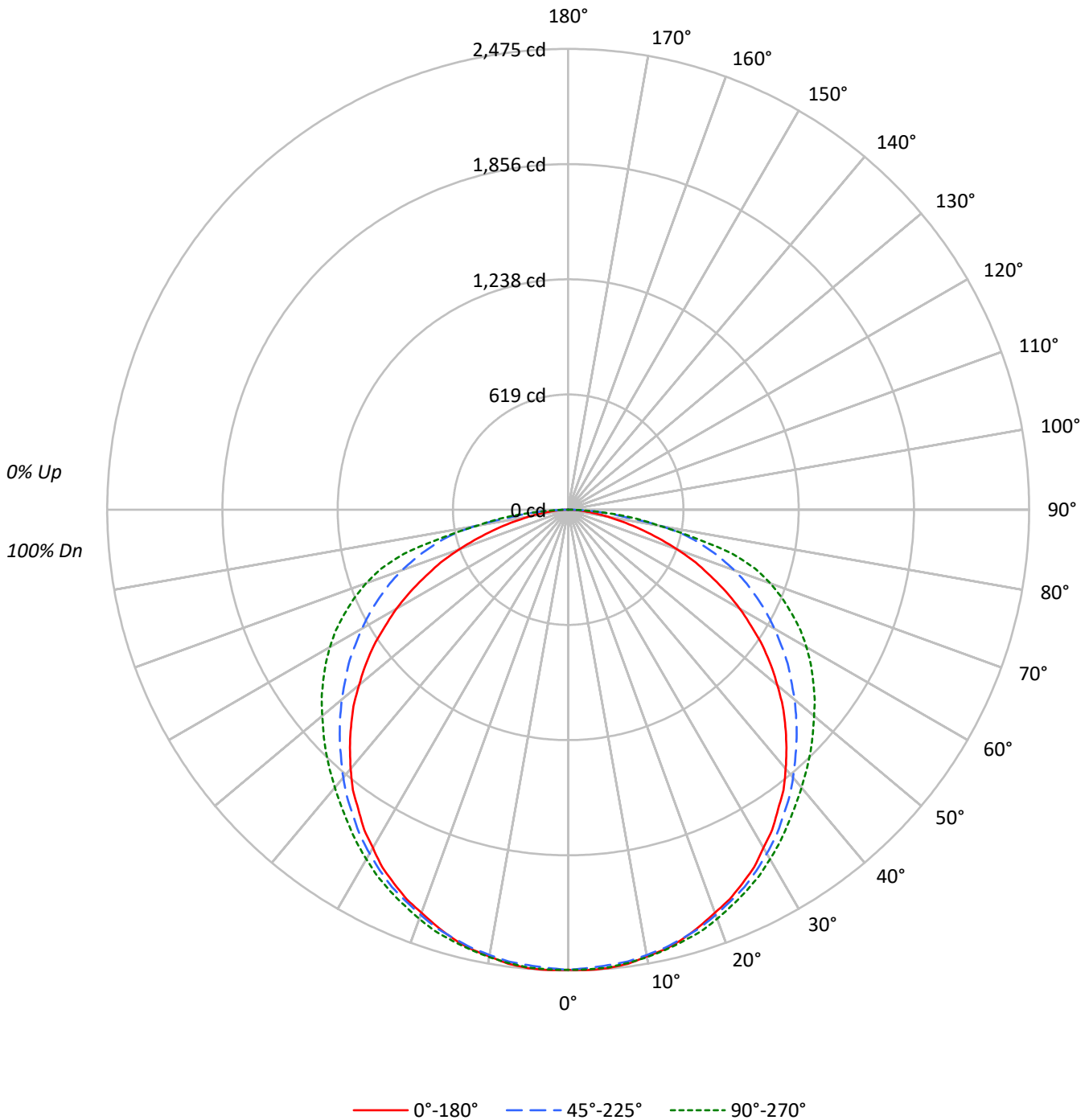
Input Watts (W): 80.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3325	3325	3325
5°	3338	3317	3333
10°	3328	3318	3334
15°	3323	3317	3339
20°	3298	3315	3349
25°	3287	3322	3356
30°	3258	3313	3367
35°	3227	3303	3380
40°	3191	3300	3423
45°	3138	3301	3500
50°	3068	3321	3607
55°	2990	3374	3767
60°	2864	3440	3975
65°	2681	3561	4219
70°	2438	3727	4538
75°	2066	3931	4742
80°	1632	3956	3835
85°	1204	3010	3372



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.4	3.0
10°-20°	674.7	8.6
20°-30°	1031.7	13.1
30°-40°	1261.2	16.0
40°-50°	1344.3	17.1
50°-60°	1285.2	16.4
60°-70°	1088.7	13.9
70°-80°	731.7	9.3
80°-90°	206.5	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°	1940.8	24.7
0°-40°	3202.0	40.7
0°-60°	5831.5	74.2
0°-90°	7858.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7858.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2471	2471	2471	2471	2471	
5°	2471	2467	2456	2467	2467	235
15°	2386	2386	2382	2401	2397	673
25°	2214	2222	2237	2257	2261	1020
35°	1964	1980	2011	2050	2058	1231
45°	1649	1676	1735	1809	1840	1272
55°	1274	1321	1438	1551	1606	1135
65°	842	928	1118	1267	1325	836
75°	397	542	756	885	912	426
85°	78	160	195	211	218	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2471.3	2471.3	2471.3	2471.3	2471.3
2.5°	2475.2	2475.2	2463.5	2471.3	2471.3
5°	2471.3	2467.4	2455.7	2467.4	2467.4
7.5°	2459.6	2455.7	2447.9	2459.6	2455.7
10°	2436.2	2436.2	2428.4	2440.1	2440.1
12.5°	2416.7	2412.8	2408.9	2424.5	2420.6
15°	2385.5	2385.5	2381.6	2401.1	2397.2
17.5°	2346.5	2350.4	2354.3	2369.9	2373.8
20°	2303.6	2311.4	2315.3	2338.7	2338.7
22.5°	2264.6	2268.5	2276.3	2299.7	2299.7
25°	2214.0	2221.8	2237.4	2256.9	2260.8
27.5°	2163.3	2167.2	2186.7	2214.0	2217.9
30°	2097.0	2108.7	2132.1	2163.3	2167.2
32.5°	2038.5	2050.2	2077.5	2108.7	2116.5
35°	1964.4	1980.0	2011.2	2050.2	2058.0
37.5°	1898.1	1909.8	1948.8	1991.7	2003.4
40°	1816.6	1839.6	1878.6	1929.3	1948.8
42.5°	1734.7	1758.1	1804.9	1870.8	1894.2
45°	1648.9	1676.2	1734.7	1808.8	1839.6
47.5°	1563.1	1594.3	1660.6	1746.4	1781.5
50°	1465.6	1504.6	1586.5	1684.0	1723.0
52.5°	1372.0	1418.8	1508.5	1617.7	1668.4
55°	1274.5	1321.3	1438.3	1551.4	1606.0
57.5°	1165.3	1227.7	1356.4	1485.1	1543.6
60°	1064.3	1122.4	1278.4	1418.8	1477.3
62.5°	955.1	1033.1	1200.4	1348.6	1407.1
65°	842.0	927.8	1118.5	1266.7	1325.2
67.5°	740.6	834.2	1037.0	1184.8	1243.3
70°	619.7	736.7	947.3	1095.1	1153.6
72.5°	506.6	635.3	853.7	998.0	1052.6
75°	397.4	541.7	756.2	884.9	912.2
77.5°	296.4	448.1	654.8	709.4	689.9
80°	210.6	358.8	510.5	483.2	494.9
82.5°	136.5	273.0	315.9	358.8	370.1
85°	78.0	159.9	195.0	210.6	218.4
87.5°	35.1	58.5	78.0	78.0	74.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)