

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: P474247

Luminaire Tested: **24CZ2-115VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474247
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-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: 7711.8 lumens
Efficiency: N/A
Efficacy: 95.7 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

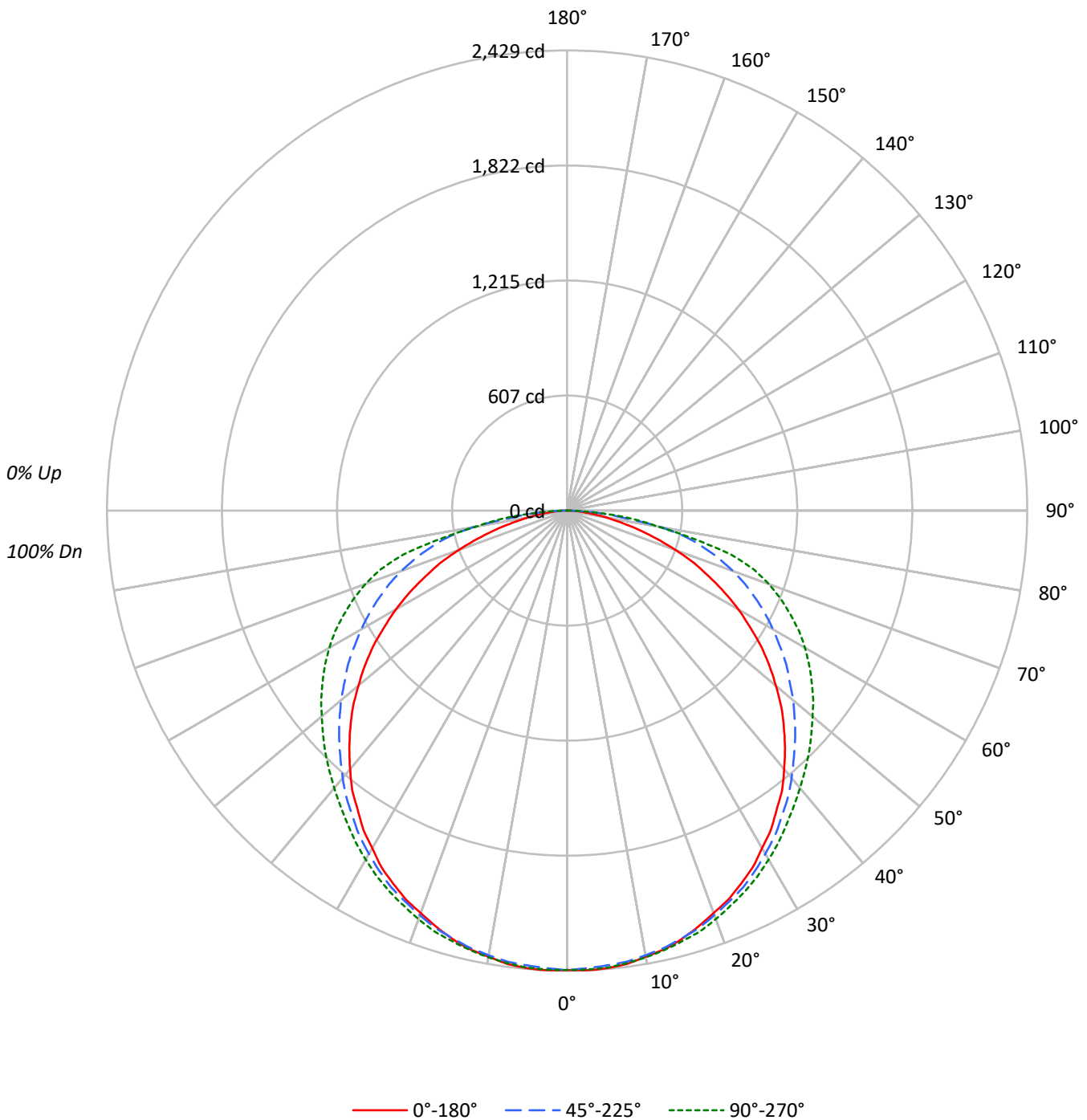
Input Watts (W): 80.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3263	3263	3263
5°	3276	3255	3270
10°	3266	3256	3272
15°	3261	3256	3277
20°	3237	3253	3286
25°	3226	3260	3294
30°	3197	3251	3304
35°	3166	3242	3317
40°	3131	3238	3359
45°	3079	3239	3435
50°	3010	3259	3539
55°	2934	3311	3697
60°	2810	3376	3901
65°	2631	3494	4140
70°	2392	3657	4454
75°	2027	3858	4654
80°	1602	3882	3763
85°	1181	2955	3308



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.1	3.0
10°-20°	662.1	8.6
20°-30°	1012.4	13.1
30°-40°	1237.6	16.0
40°-50°	1319.2	17.1
50°-60°	1261.3	16.4
60°-70°	1068.4	13.9
70°-80°	718.1	9.3
80°-90°	202.6	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°	1904.6	24.7
0°-40°	3142.2	40.7
0°-60°	5722.7	74.2
0°-90°	7711.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7711.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2425	2425	2425	2425	2425	
5°	2425	2421	2410	2421	2421	230
15°	2341	2341	2337	2356	2352	660
25°	2173	2180	2196	2215	2219	1001
35°	1928	1943	1974	2012	2020	1208
45°	1618	1645	1702	1775	1805	1248
55°	1251	1297	1412	1522	1576	1114
65°	826	910	1098	1243	1300	820
75°	390	532	742	868	895	418
85°	76	157	191	207	214	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2425.3	2425.3	2425.3	2425.3	2425.3
2.5°	2429.1	2429.1	2417.6	2425.3	2425.3
5°	2425.3	2421.4	2410.0	2421.4	2421.4
7.5°	2413.8	2410.0	2402.3	2413.8	2410.0
10°	2390.8	2390.8	2383.2	2394.6	2394.6
12.5°	2371.7	2367.9	2364.0	2379.3	2375.5
15°	2341.1	2341.1	2337.2	2356.4	2352.5
17.5°	2302.8	2306.6	2310.4	2325.8	2329.6
20°	2260.7	2268.3	2272.2	2295.1	2295.1
22.5°	2222.4	2226.3	2233.9	2256.9	2256.9
25°	2172.7	2180.3	2195.6	2214.8	2218.6
27.5°	2122.9	2126.7	2145.9	2172.7	2176.5
30°	2057.9	2069.3	2092.3	2122.9	2126.7
32.5°	2000.4	2011.9	2038.7	2069.3	2077.0
35°	1927.7	1943.0	1973.7	2011.9	2019.6
37.5°	1862.7	1874.2	1912.4	1954.5	1966.0
40°	1782.7	1805.3	1843.5	1893.3	1912.4
42.5°	1702.3	1725.3	1771.2	1835.9	1858.8
45°	1618.1	1644.9	1702.3	1775.0	1805.3
47.5°	1533.9	1564.5	1629.6	1713.8	1748.2
50°	1438.2	1476.5	1556.9	1652.6	1690.8
52.5°	1346.4	1392.3	1480.3	1587.5	1637.3
55°	1250.7	1296.6	1411.5	1522.4	1576.0
57.5°	1143.6	1204.8	1331.1	1457.4	1514.8
60°	1044.4	1101.5	1254.5	1392.3	1449.7
62.5°	937.3	1013.8	1178.0	1323.4	1380.8
65°	826.3	910.5	1097.6	1243.1	1300.5
67.5°	726.8	818.6	1017.6	1162.7	1220.1
70°	608.1	722.9	929.6	1074.7	1132.1
72.5°	497.1	623.4	837.8	979.4	1032.9
75°	390.0	531.6	742.1	868.4	895.2
77.5°	290.9	439.7	642.6	696.2	677.0
80°	206.7	352.1	501.0	474.2	485.7
82.5°	134.0	267.9	310.0	352.1	363.2
85°	76.5	156.9	191.4	206.7	214.3
87.5°	34.4	57.4	76.5	76.5	72.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)