

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: P474896

Luminaire Tested: **22CZ2-65VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474896
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-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: 6406.2 lumens
Efficiency: N/A
Efficacy: 140.2 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

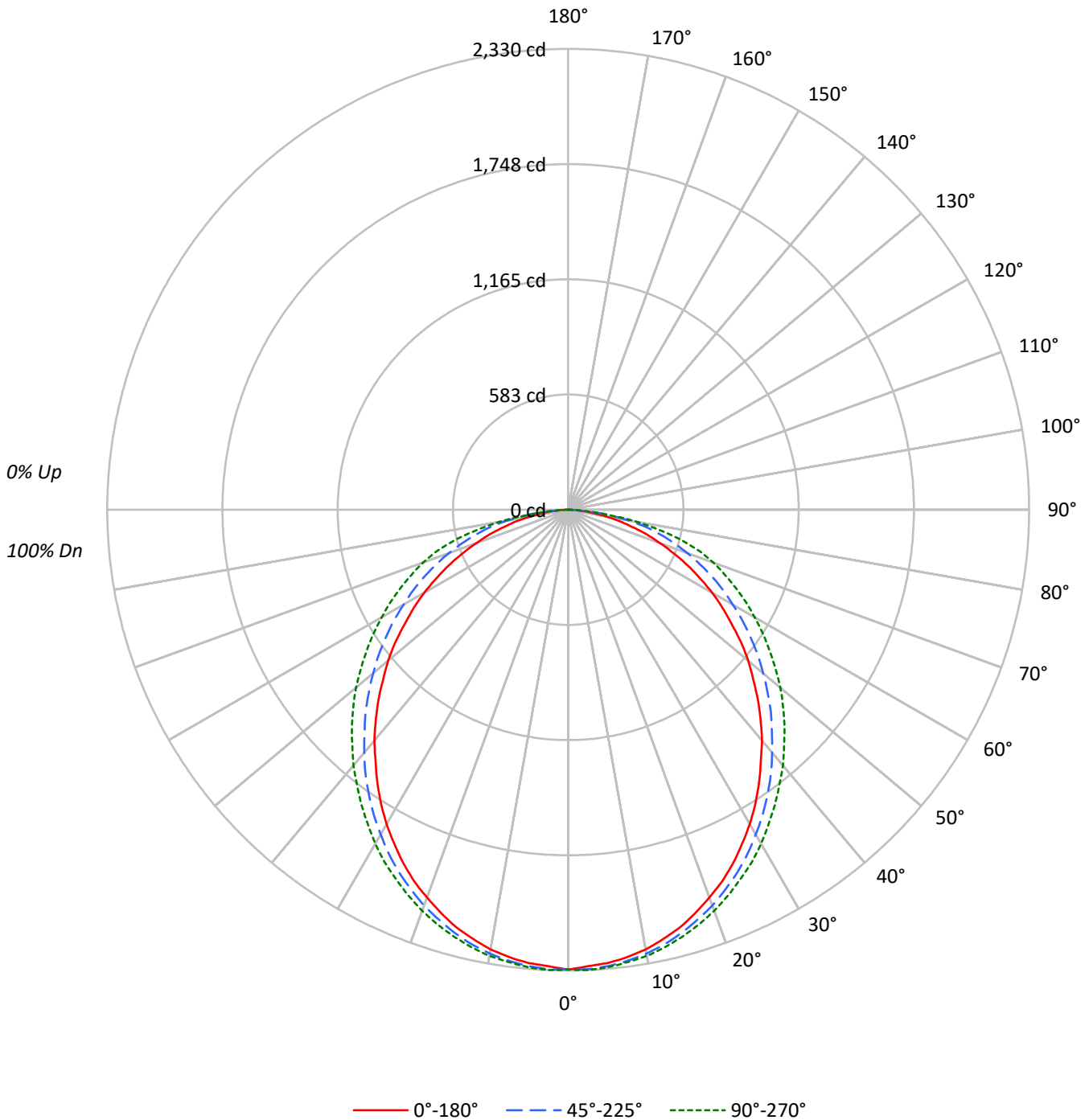
Input Watts (W): 45.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6258	6258	6258
5°	6215	6256	6273
10°	6168	6227	6261
15°	6090	6172	6224
20°	5976	6100	6180
25°	5855	6007	6117
30°	5704	5891	6060
35°	5526	5770	5984
40°	5353	5631	5931
45°	5157	5511	5882
50°	4971	5387	5861
55°	4735	5280	5833
60°	4522	5173	5857
65°	4245	5114	5943
70°	3879	5050	6135
75°	3482	5012	6142
80°	2930	4733	5453
85°	2201	3208	2967



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.6	3.4
10°-20°	623.8	9.7
20°-30°	930.0	14.5
30°-40°	1097.4	17.1
40°-50°	1118.1	17.5
50°-60°	1008.3	15.7
60°-70°	791.9	12.4
70°-80°	495.1	7.7
80°-90°	122.0	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°	1773.4	27.7
0°-40°	2870.8	44.8
0°-60°	4997.2	78.0
0°-90°	6406.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6406.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2325	2325	2325	2325	2325	
5°	2301	2305	2316	2321	2322	218
15°	2186	2194	2215	2231	2234	615
25°	1972	1983	2023	2053	2060	907
35°	1682	1705	1756	1804	1822	1052
45°	1355	1378	1448	1518	1546	1045
55°	1009	1042	1126	1212	1243	905
65°	667	702	803	893	933	658
75°	335	381	482	564	591	358
85°	71	92	104	102	96	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2325.4	2325.4	2325.4	2325.4	2325.4
2.5°	2309.9	2314.6	2325.4	2330.1	2330.1
5°	2300.6	2305.3	2316.1	2320.8	2322.3
7.5°	2282.0	2288.2	2300.6	2306.8	2306.8
10°	2257.2	2265.0	2278.9	2288.2	2291.3
12.5°	2223.1	2232.4	2251.0	2261.9	2265.0
15°	2185.9	2193.7	2215.4	2230.9	2234.0
17.5°	2137.9	2150.3	2173.5	2193.7	2198.3
20°	2086.7	2100.7	2130.1	2153.4	2158.0
22.5°	2034.0	2044.8	2077.4	2105.3	2111.5
25°	1972.0	1982.8	2023.1	2052.6	2060.3
27.5°	1903.8	1922.4	1962.7	1996.8	2009.2
30°	1835.6	1854.2	1896.0	1936.3	1950.3
32.5°	1761.1	1781.3	1829.3	1871.2	1885.2
35°	1682.1	1705.3	1756.5	1804.5	1821.6
37.5°	1599.9	1626.3	1683.6	1734.8	1753.4
40°	1523.9	1542.5	1603.0	1661.9	1688.3
42.5°	1438.7	1463.5	1523.9	1590.6	1615.4
45°	1355.0	1378.2	1448.0	1517.7	1545.6
47.5°	1268.1	1297.6	1367.4	1444.9	1472.8
50°	1187.5	1212.3	1286.7	1368.9	1399.9
52.5°	1100.7	1127.1	1207.7	1292.9	1320.9
55°	1009.2	1041.8	1125.5	1212.3	1243.3
57.5°	925.5	956.5	1044.9	1134.8	1167.4
60°	840.3	871.3	961.2	1052.7	1088.3
62.5°	750.3	786.0	883.7	972.0	1012.3
65°	666.6	702.3	803.1	893.0	933.3
67.5°	578.3	620.1	720.9	815.5	855.8
70°	493.0	542.6	641.8	734.8	779.8
72.5°	417.0	457.3	561.2	658.9	696.1
75°	334.9	381.4	482.1	564.3	590.7
77.5°	265.1	305.4	401.5	455.8	472.8
80°	189.1	234.1	305.4	338.0	351.9
82.5°	125.6	162.8	207.7	213.9	210.8
85°	71.3	91.5	103.9	102.3	96.1
87.5°	27.9	31.0	23.3	14.0	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)