

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: P474780

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474780  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-65VHE-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

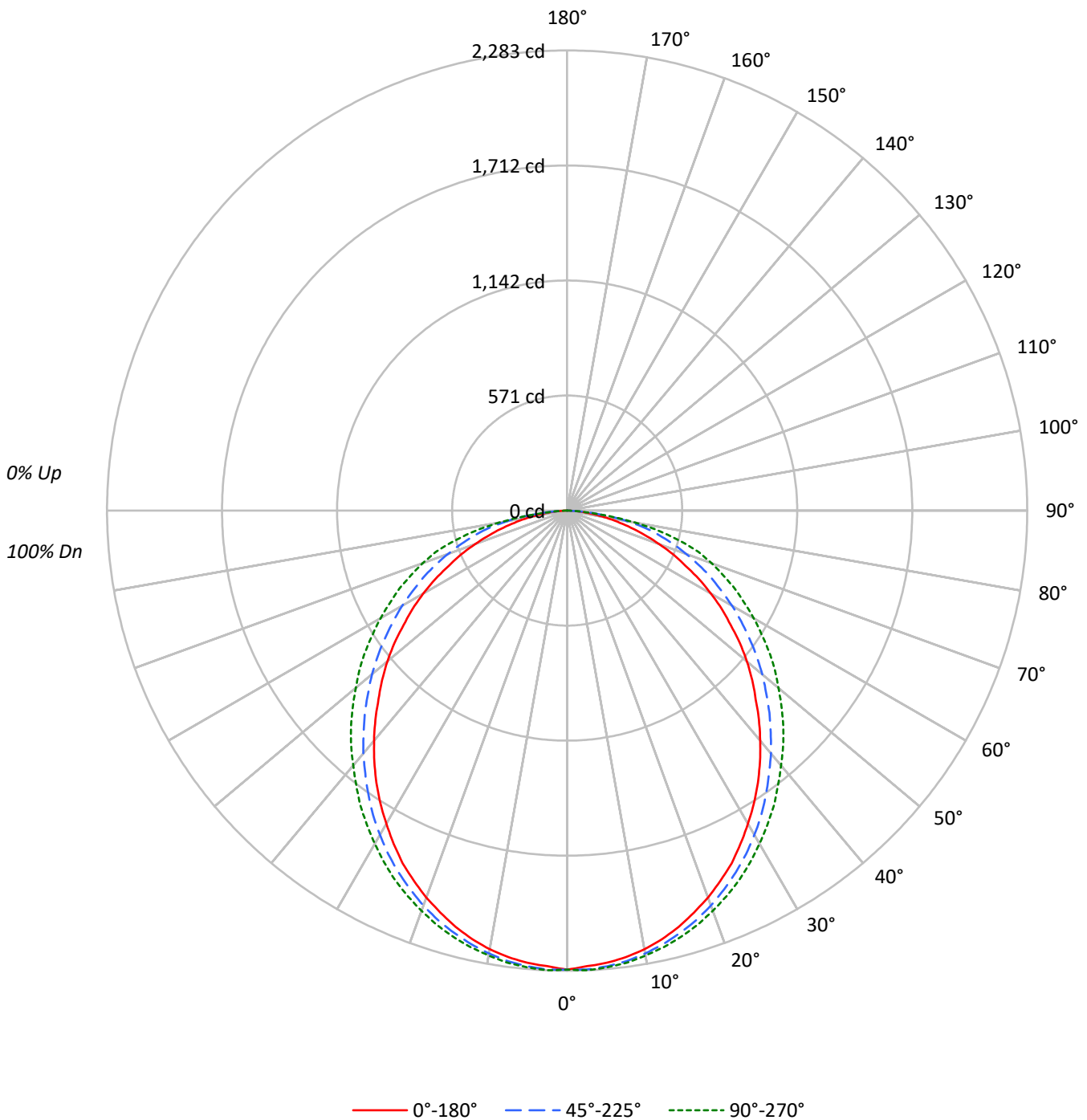
Lumens per Lamp: N/A  
Luminaire Lumens: 6280.0 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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	87	85	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	73	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	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6128	6128	6128
5°	6084	6131	6145
10°	6038	6096	6125
15°	5957	6042	6097
20°	5849	5971	6051
25°	5733	5880	6002
30°	5575	5774	5930
35°	5419	5650	5873
40°	5236	5525	5800
45°	5036	5399	5773
50°	4873	5290	5728
55°	4645	5174	5741
60°	4436	5086	5757
65°	4124	5019	5848
70°	3811	4950	5994
75°	3408	4926	6030
80°	2859	4669	5266
85°	2214	3196	2992



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.2	3.4
10°-20°	610.8	9.7
20°-30°	910.7	14.5
30°-40°	1075.1	17.1
40°-50°	1095.8	17.4
50°-60°	988.2	15.7
60°-70°	776.7	12.4
70°-80°	486.3	7.7
80°-90°	121.3	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°	1736.7	27.7
0°-40°	2811.8	44.8
0°-60°	4895.8	78.0
0°-90°	6280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6280.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2277	2277	2277	2277	2277	
5°	2252	2258	2270	2275	2275	214
15°	2138	2147	2169	2184	2188	602
25°	1931	1946	1980	2011	2021	888
35°	1650	1671	1720	1768	1788	1031
45°	1323	1352	1419	1488	1517	1024
55°	990	1021	1103	1188	1224	889
65°	648	688	788	876	918	646
75°	328	377	474	559	580	348
85°	72	92	104	104	97	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2277.4	2277.4	2277.4	2277.4	2277.4
2.5°	2262.8	2268.2	2278.8	2282.8	2282.8
5°	2252.2	2257.5	2269.5	2274.8	2274.8
7.5°	2235.0	2240.3	2254.9	2261.5	2262.8
10°	2209.8	2216.4	2231.0	2241.6	2241.6
12.5°	2177.9	2184.5	2203.1	2216.4	2217.7
15°	2138.1	2147.4	2168.6	2184.5	2188.5
17.5°	2091.6	2106.2	2130.1	2150.0	2154.0
20°	2042.5	2057.1	2085.0	2107.6	2112.9
22.5°	1988.1	2001.4	2034.6	2062.4	2069.1
25°	1931.0	1945.6	1980.2	2010.7	2021.3
27.5°	1863.4	1880.6	1921.8	1956.3	1966.9
30°	1794.3	1815.6	1858.1	1896.5	1908.5
32.5°	1724.0	1743.9	1791.7	1832.8	1848.8
35°	1649.7	1670.9	1720.0	1767.8	1787.7
37.5°	1571.4	1592.6	1645.7	1700.1	1718.7
40°	1490.4	1515.6	1572.7	1631.1	1651.0
42.5°	1408.1	1434.7	1494.4	1559.4	1586.0
45°	1323.2	1352.4	1418.8	1487.8	1517.0
47.5°	1246.2	1270.1	1339.1	1414.8	1442.6
50°	1163.9	1186.5	1263.5	1339.1	1368.3
52.5°	1080.3	1101.6	1183.8	1263.5	1299.3
55°	990.1	1020.6	1102.9	1187.8	1223.7
57.5°	910.4	938.3	1023.3	1109.5	1144.0
60°	824.2	853.4	945.0	1032.5	1069.7
62.5°	737.9	769.8	862.7	956.9	991.4
65°	647.7	687.5	788.3	875.9	918.4
67.5°	570.7	609.2	708.7	800.3	837.5
70°	484.4	529.5	629.1	722.0	761.8
72.5°	403.5	448.6	550.8	643.7	683.5
75°	327.8	376.9	473.8	558.7	580.0
77.5°	254.8	301.3	398.2	447.3	469.8
80°	184.5	229.6	301.3	334.4	339.8
82.5°	124.8	163.2	204.4	213.7	208.4
85°	71.7	91.6	103.5	103.5	96.9
87.5°	29.2	29.2	25.2	15.9	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)