

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: P474812

Luminaire Tested: **22CZ2-80VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474812
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

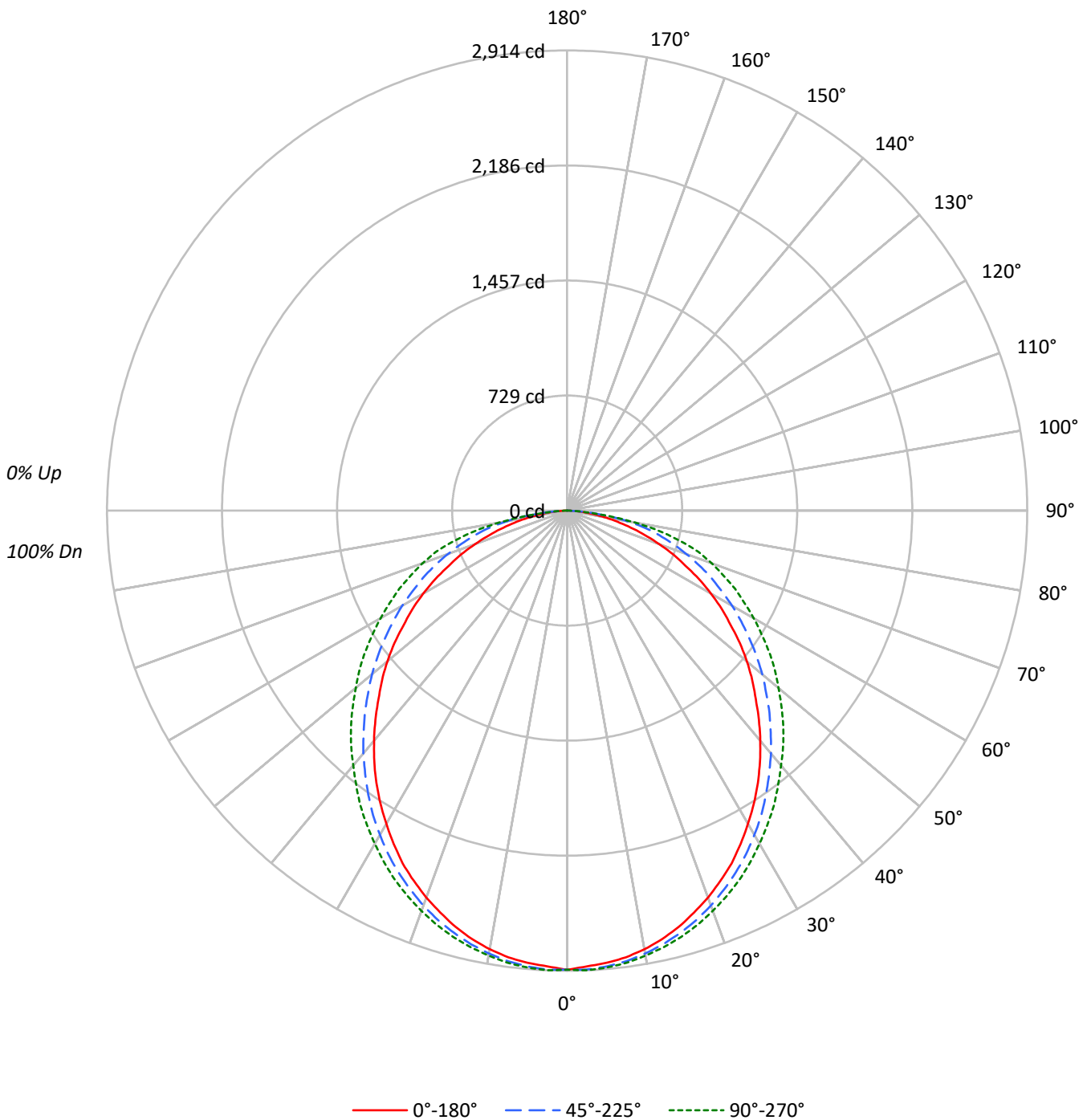
Lumens per Lamp: N/A
Luminaire Lumens: 8016.7 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 58.7
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83				83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69				69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58				58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50				50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43				43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38				38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33				33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30				30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27				27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7823	7823	7823
5°	7766	7826	7844
10°	7708	7782	7819
15°	7604	7712	7783
20°	7467	7622	7724
25°	7319	7505	7661
30°	7118	7370	7570
35°	6918	7213	7497
40°	6683	7052	7404
45°	6428	6892	7370
50°	6220	6752	7312
55°	5930	6605	7329
60°	5662	6492	7349
65°	5265	6408	7465
70°	4866	6319	7652
75°	4351	6288	7698
80°	3649	5960	6721
85°	2825	4079	3819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.7	3.4
10°-20°	779.7	9.7
20°-30°	1162.6	14.5
30°-40°	1372.5	17.1
40°-50°	1398.8	17.4
50°-60°	1261.4	15.7
60°-70°	991.5	12.4
70°-80°	620.8	7.7
80°-90°	154.8	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°	2217.0	27.7
0°-40°	3589.4	44.8
0°-60°	6249.7	78.0
0°-90°	8016.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8016.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2907	2907	2907	2907	2907	
5°	2875	2882	2897	2904	2904	273
15°	2729	2741	2768	2789	2794	769
25°	2465	2484	2528	2567	2580	1133
35°	2106	2133	2196	2257	2282	1316
45°	1689	1726	1811	1899	1936	1307
55°	1264	1303	1408	1516	1562	1134
65°	827	878	1006	1118	1172	824
75°	418	481	605	713	740	444
85°	92	117	132	132	124	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2907.3	2907.3	2907.3	2907.3	2907.3
2.5°	2888.6	2895.4	2909.0	2914.0	2914.0
5°	2875.1	2881.9	2897.1	2903.9	2903.9
7.5°	2853.0	2859.8	2878.5	2886.9	2888.6
10°	2820.9	2829.3	2848.0	2861.5	2861.5
12.5°	2780.2	2788.7	2812.4	2829.3	2831.0
15°	2729.4	2741.2	2768.3	2788.7	2793.8
17.5°	2670.1	2688.7	2719.2	2744.6	2749.7
20°	2607.4	2626.0	2661.6	2690.4	2697.2
22.5°	2537.9	2554.9	2597.2	2632.8	2641.3
25°	2465.1	2483.7	2527.8	2566.7	2580.3
27.5°	2378.7	2400.7	2453.2	2497.3	2510.8
30°	2290.6	2317.7	2371.9	2421.0	2436.3
32.5°	2200.8	2226.2	2287.2	2339.7	2360.0
35°	2105.9	2133.0	2195.7	2256.7	2282.1
37.5°	2005.9	2033.1	2100.8	2170.3	2194.0
40°	1902.6	1934.8	2007.6	2082.2	2107.6
42.5°	1797.6	1831.4	1907.7	1990.7	2024.6
45°	1689.1	1726.4	1811.1	1899.2	1936.5
47.5°	1590.9	1621.4	1709.5	1806.0	1841.6
50°	1485.8	1514.6	1612.9	1709.5	1746.7
52.5°	1379.1	1406.2	1511.2	1612.9	1658.6
55°	1263.9	1302.8	1407.9	1516.3	1562.1
57.5°	1162.2	1197.8	1306.2	1416.4	1460.4
60°	1052.1	1089.4	1206.3	1318.1	1365.5
62.5°	942.0	982.6	1101.2	1221.5	1265.6
65°	826.8	877.6	1006.4	1118.2	1172.4
67.5°	728.5	777.6	904.7	1021.6	1069.0
70°	618.4	676.0	803.1	921.7	972.5
72.5°	515.0	572.6	703.1	821.7	872.5
75°	418.5	481.2	604.8	713.3	740.4
77.5°	325.3	384.6	508.3	570.9	599.8
80°	235.5	293.1	384.6	426.9	433.7
82.5°	159.3	208.4	260.9	272.8	266.0
85°	91.5	116.9	132.1	132.1	123.7
87.5°	37.3	37.3	32.2	20.3	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)