

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: P474813

Luminaire Tested: **22CZ2-85VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474813
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-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

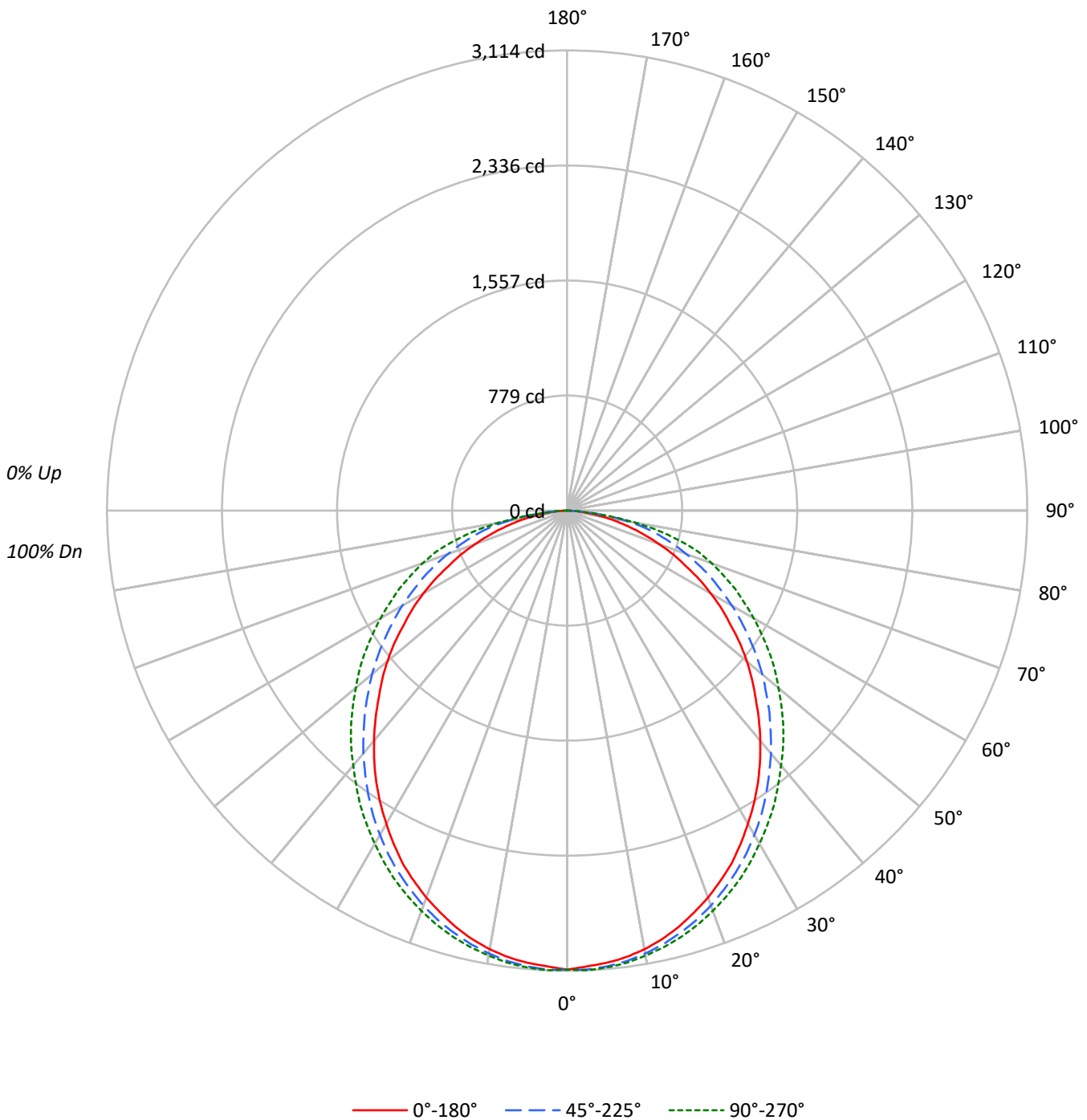
Lumens per Lamp: N/A
Luminaire Lumens: 8566.7 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 63.1
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°	8360	8360	8360
5°	8299	8363	8382
10°	8237	8316	8355
15°	8125	8242	8317
20°	7979	8145	8254
25°	7821	8020	8187
30°	7606	7876	8089
35°	7393	7708	8011
40°	7142	7536	7912
45°	6869	7365	7875
50°	6647	7215	7814
55°	6336	7058	7831
60°	6051	6937	7853
65°	5626	6848	7977
70°	5199	6751	8176
75°	4650	6720	8226
80°	3901	6369	7183
85°	3020	4360	4082



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.5	3.4
10°-20°	833.2	9.7
20°-30°	1242.4	14.5
30°-40°	1466.6	17.1
40°-50°	1494.8	17.4
50°-60°	1348.0	15.7
60°-70°	1059.5	12.4
70°-80°	663.3	7.7
80°-90°	165.4	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°	2369.1	27.7
0°-40°	3835.7	44.8
0°-60°	6678.4	78.0
0°-90°	8566.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8566.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3107	3107	3107	3107	3107	
5°	3072	3080	3096	3103	3103	291
15°	2917	2929	2958	2980	2985	822
25°	2634	2654	2701	2743	2757	1211
35°	2250	2279	2346	2412	2439	1406
45°	1805	1845	1935	2030	2069	1396
55°	1351	1392	1504	1620	1669	1212
65°	884	938	1075	1195	1253	881
75°	447	514	646	762	791	475
85°	98	125	141	141	132	118
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3106.7	3106.7	3106.7	3106.7	3106.7
2.5°	3086.8	3094.0	3108.5	3114.0	3114.0
5°	3072.3	3079.6	3095.9	3103.1	3103.1
7.5°	3048.8	3056.0	3075.9	3085.0	3086.8
10°	3014.4	3023.4	3043.3	3057.8	3057.8
12.5°	2970.9	2980.0	3005.3	3023.4	3025.2
15°	2916.6	2929.3	2958.3	2980.0	2985.4
17.5°	2853.3	2873.2	2905.8	2932.9	2938.3
20°	2786.3	2806.2	2844.2	2875.0	2882.2
22.5°	2712.0	2730.1	2775.4	2813.4	2822.5
25°	2634.2	2654.1	2701.2	2742.8	2757.3
27.5°	2541.9	2565.4	2621.5	2668.6	2683.1
30°	2447.7	2476.7	2534.6	2587.1	2603.4
32.5°	2351.8	2378.9	2444.1	2500.2	2521.9
35°	2250.4	2279.3	2346.3	2411.5	2438.7
37.5°	2143.6	2172.5	2244.9	2319.2	2344.5
40°	2033.1	2067.5	2145.4	2225.0	2252.2
42.5°	1920.9	1957.1	2038.6	2127.3	2163.5
45°	1805.0	1844.8	1935.4	2029.5	2069.3
47.5°	1700.0	1732.6	1826.7	1929.9	1967.9
50°	1587.8	1618.5	1723.5	1826.7	1866.6
52.5°	1473.7	1502.7	1614.9	1723.5	1772.4
55°	1350.6	1392.2	1504.5	1620.3	1669.2
57.5°	1242.0	1280.0	1395.8	1513.5	1560.6
60°	1124.3	1164.1	1289.0	1408.5	1459.2
62.5°	1006.6	1050.1	1176.8	1305.3	1352.4
65°	883.5	937.8	1075.4	1194.9	1252.8
67.5°	778.5	831.0	966.8	1091.7	1142.4
70°	660.8	722.4	858.1	984.9	1039.2
72.5°	550.4	611.9	751.3	878.1	932.4
75°	447.2	514.2	646.3	762.2	791.2
77.5°	347.6	411.0	543.1	610.1	640.9
80°	251.7	313.2	411.0	456.2	463.5
82.5°	170.2	222.7	278.8	291.5	284.2
85°	97.8	124.9	141.2	141.2	132.2
87.5°	39.8	39.8	34.4	21.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)