

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: P474784

Luminaire Tested: **22CZ2-85VHE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474784
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-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: 8266.9 lumens
Efficiency: N/A
Efficacy: 131.0 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

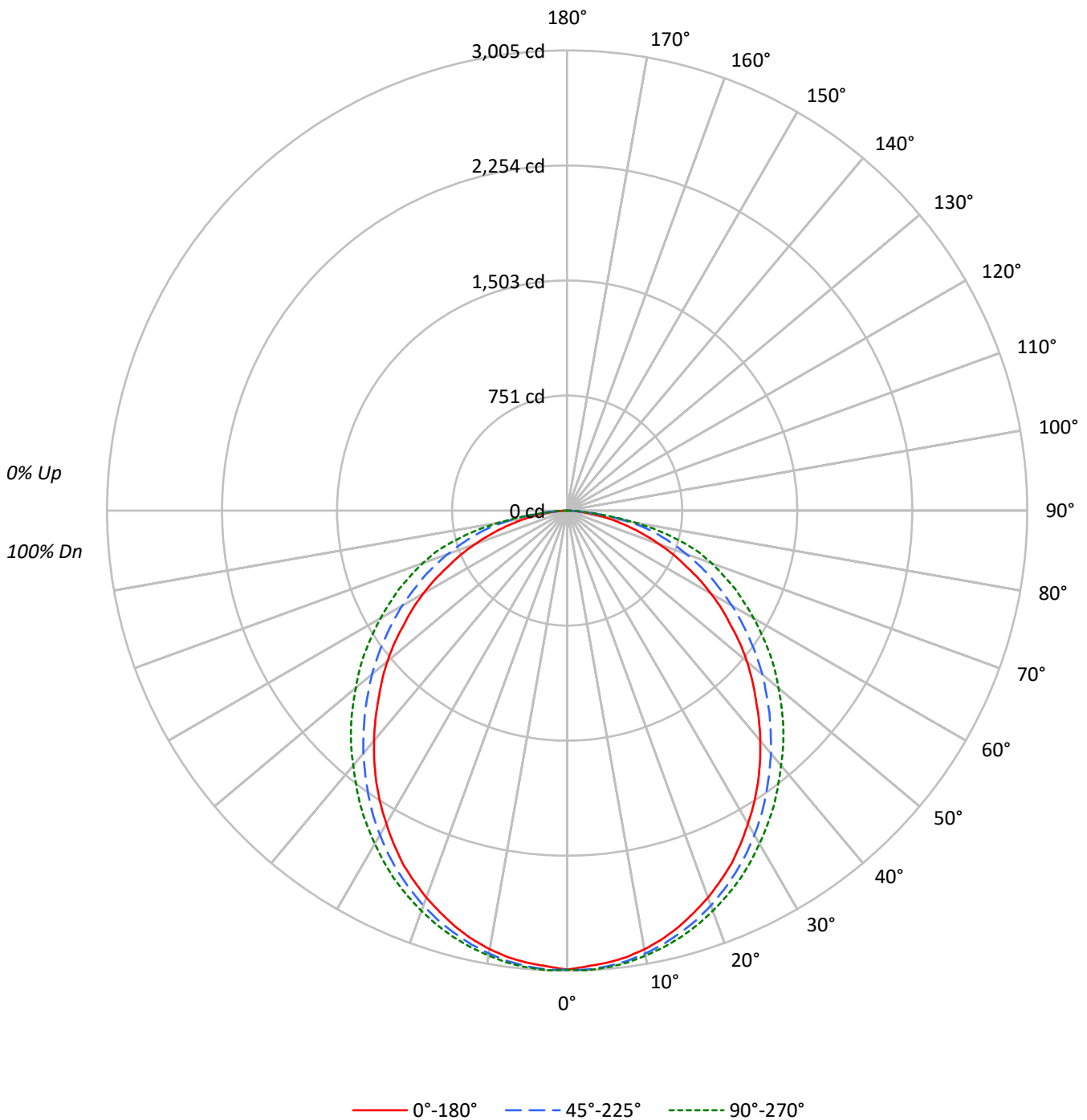
Input Watts (W): 63.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8068	8068	8068
5°	8009	8070	8089
10°	7949	8025	8063
15°	7841	7953	8026
20°	7700	7860	7965
25°	7548	7739	7900
30°	7339	7600	7806
35°	7134	7438	7731
40°	6892	7273	7635
45°	6629	7107	7599
50°	6414	6963	7541
55°	6115	6811	7557
60°	5839	6695	7578
65°	5429	6608	7698
70°	5017	6515	7890
75°	4486	6485	7938
80°	3763	6146	6932
85°	2912	4208	3937



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	3.4
10°-20°	804.1	9.7
20°-30°	1198.9	14.5
30°-40°	1415.3	17.1
40°-50°	1442.4	17.4
50°-60°	1300.8	15.7
60°-70°	1022.4	12.4
70°-80°	640.1	7.7
80°-90°	159.6	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°	2286.2	27.7
0°-40°	3701.5	44.8
0°-60°	6444.7	78.0
0°-90°	8266.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8266.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2998	2998	2998	2998	2998	
5°	2965	2972	2988	2994	2994	281
15°	2814	2827	2855	2876	2881	793
25°	2542	2561	2607	2647	2661	1169
35°	2172	2200	2264	2327	2353	1357
45°	1742	1780	1868	1958	1997	1347
55°	1303	1344	1452	1564	1611	1170
65°	853	905	1038	1153	1209	850
75°	432	496	624	736	764	458
85°	94	120	136	136	128	114
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2998.0	2998.0	2998.0	2998.0	2998.0
2.5°	2978.8	2985.7	2999.7	3005.0	3005.0
5°	2964.8	2971.8	2987.5	2994.5	2994.5
7.5°	2942.1	2949.1	2968.3	2977.0	2978.8
10°	2908.9	2917.6	2936.8	2950.8	2950.8
12.5°	2866.9	2875.7	2900.1	2917.6	2919.4
15°	2814.5	2826.8	2854.7	2875.7	2880.9
17.5°	2753.4	2772.6	2804.1	2830.3	2835.5
20°	2688.7	2708.0	2744.7	2774.4	2781.3
22.5°	2617.1	2634.6	2678.3	2715.0	2723.7
25°	2542.0	2561.2	2606.6	2646.8	2660.8
27.5°	2452.9	2475.6	2529.8	2575.2	2589.2
30°	2362.0	2390.0	2445.9	2496.6	2512.3
32.5°	2269.4	2295.7	2358.6	2412.7	2433.7
35°	2171.6	2199.6	2264.2	2327.1	2353.3
37.5°	2068.5	2096.5	2166.4	2238.0	2262.5
40°	1962.0	1995.2	2070.3	2147.2	2173.4
42.5°	1853.6	1888.6	1967.2	2052.8	2087.8
45°	1741.8	1780.3	1867.6	1958.5	1996.9
47.5°	1640.5	1671.9	1762.8	1862.4	1899.1
50°	1532.2	1561.9	1663.2	1762.8	1801.2
52.5°	1422.1	1450.1	1558.4	1663.2	1710.4
55°	1303.3	1343.5	1451.8	1563.6	1610.8
57.5°	1198.5	1235.2	1347.0	1460.6	1506.0
60°	1084.9	1123.4	1243.9	1359.2	1408.1
62.5°	971.4	1013.3	1135.6	1259.6	1305.1
65°	852.6	905.0	1037.8	1153.1	1209.0
67.5°	751.2	801.9	932.9	1053.5	1102.4
70°	637.7	697.1	828.1	950.4	1002.8
72.5°	531.1	590.5	725.0	847.3	899.7
75°	431.5	496.2	623.7	735.5	763.5
77.5°	335.4	396.6	524.1	588.8	618.5
80°	242.8	302.2	396.6	440.3	447.3
82.5°	164.2	214.9	269.0	281.3	274.3
85°	94.3	120.5	136.3	136.3	127.5
87.5°	38.4	38.4	33.2	21.0	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)