

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: P473855

Luminaire Tested: **24CZ2-155VHE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473855
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-155VHE-UNV-L835-CD1-U
Description: 2'X4' 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: 15544.8 lumens
Efficiency: N/A
Efficacy: 136.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

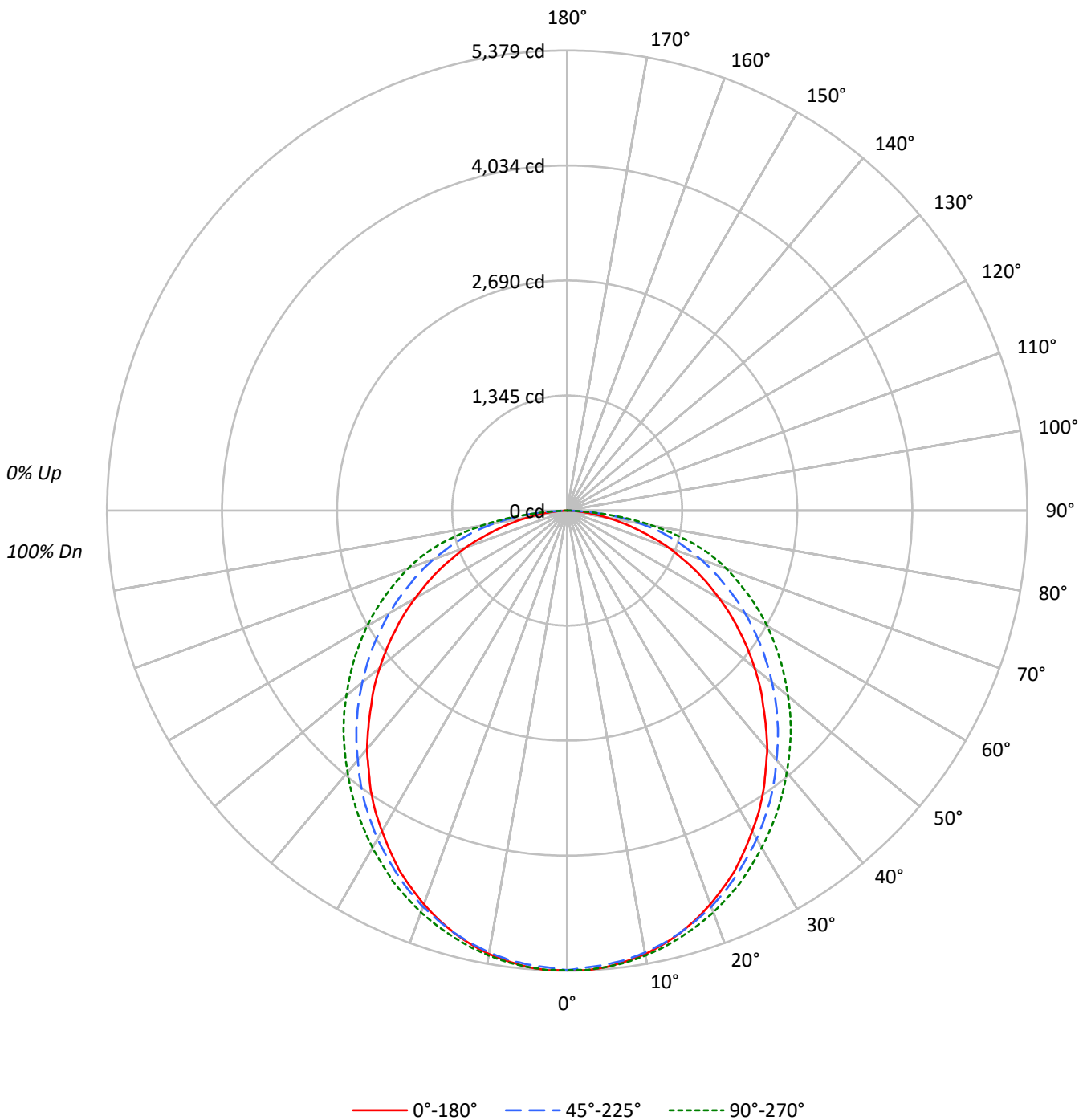
Input Watts (W): 114
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61		71	65	60		68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52		63	57	51		61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45		56	50	44		55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39		51	44	39		49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25		36	30	25		36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7228	7228	7228
5°	7231	7194	7231
10°	7192	7167	7216
15°	7119	7115	7185
20°	7012	7055	7156
25°	6890	6968	7121
30°	6723	6886	7070
35°	6571	6798	7041
40°	6391	6687	7013
45°	6174	6618	7034
50°	5987	6545	7055
55°	5767	6498	7134
60°	5528	6467	7265
65°	5269	6444	7451
70°	4960	6511	7795
75°	4361	6645	8107
80°	3639	6694	7822
85°	2598	5738	5815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.8	3.3
10°-20°	1446.4	9.3
20°-30°	2169.9	14.0
30°-40°	2590.6	16.7
40°-50°	2683.4	17.3
50°-60°	2470.3	15.9
60°-70°	1992.7	12.8
70°-80°	1302.0	8.4
80°-90°	381.7	2.5
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°	4124.0	26.5
0°-40°	6714.6	43.2
0°-60°	11868.3	76.3
0°-90°	15544.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15544.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5372	5372	5372	5372	5372	
5°	5354	5349	5326	5357	5354	508
15°	5110	5110	5108	5158	5158	1440
25°	4641	4651	4694	4779	4797	2134
35°	4000	4036	4139	4252	4287	2499
45°	3245	3325	3478	3634	3697	2508
55°	2459	2564	2770	2973	3041	2200
65°	1655	1768	2024	2255	2340	1636
75°	839	997	1278	1499	1560	895
85°	168	291	372	394	377	209
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5371.7	5371.7	5371.7	5371.7	5371.7
2.5°	5379.2	5371.7	5344.1	5376.7	5374.2
5°	5354.1	5349.1	5326.5	5356.6	5354.1
7.5°	5313.9	5311.4	5293.8	5326.5	5326.5
10°	5263.7	5258.7	5246.1	5283.8	5281.3
12.5°	5193.4	5190.9	5183.3	5228.5	5226.0
15°	5110.5	5110.5	5108.0	5158.2	5158.2
17.5°	5010.1	5012.6	5022.6	5080.4	5082.9
20°	4897.1	4907.1	4927.2	4992.5	4997.5
22.5°	4769.0	4789.1	4816.7	4889.5	4897.1
25°	4640.9	4650.9	4693.6	4779.0	4796.6
27.5°	4485.2	4510.3	4565.6	4653.5	4671.0
30°	4327.0	4362.1	4432.5	4522.9	4550.5
32.5°	4171.3	4201.4	4284.3	4387.3	4419.9
35°	4000.5	4035.7	4138.6	4251.6	4286.8
37.5°	3812.2	3867.4	3975.4	4106.0	4143.7
40°	3638.9	3689.1	3807.1	3952.8	3993.0
42.5°	3440.5	3503.3	3646.4	3794.6	3844.8
45°	3244.6	3325.0	3478.2	3633.9	3696.6
47.5°	3061.3	3126.6	3307.4	3483.2	3538.4
50°	2860.4	2935.7	3126.6	3312.4	3370.2
52.5°	2662.0	2752.4	2945.8	3141.6	3204.4
55°	2458.6	2564.0	2770.0	2973.4	3041.2
57.5°	2262.7	2368.2	2581.6	2797.6	2867.9
60°	2054.3	2167.3	2403.3	2611.8	2699.7
62.5°	1853.3	1966.4	2215.0	2441.0	2523.9
65°	1655.0	1768.0	2024.1	2255.2	2340.5
67.5°	1449.0	1572.1	1845.8	2069.3	2152.2
70°	1260.7	1378.7	1655.0	1893.5	1981.4
72.5°	1044.7	1185.3	1466.6	1702.7	1785.5
75°	838.8	997.0	1278.3	1499.3	1559.5
77.5°	647.9	806.1	1087.4	1253.1	1290.8
80°	469.6	630.3	863.9	979.4	1009.5
82.5°	303.9	469.6	625.3	703.2	713.2
85°	168.3	291.3	371.7	394.3	376.7
87.5°	60.3	110.5	108.0	87.9	70.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)