

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: P474055

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474055
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-155VHE-S-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15856.0 lumens
Efficiency: N/A
Efficacy: 139.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

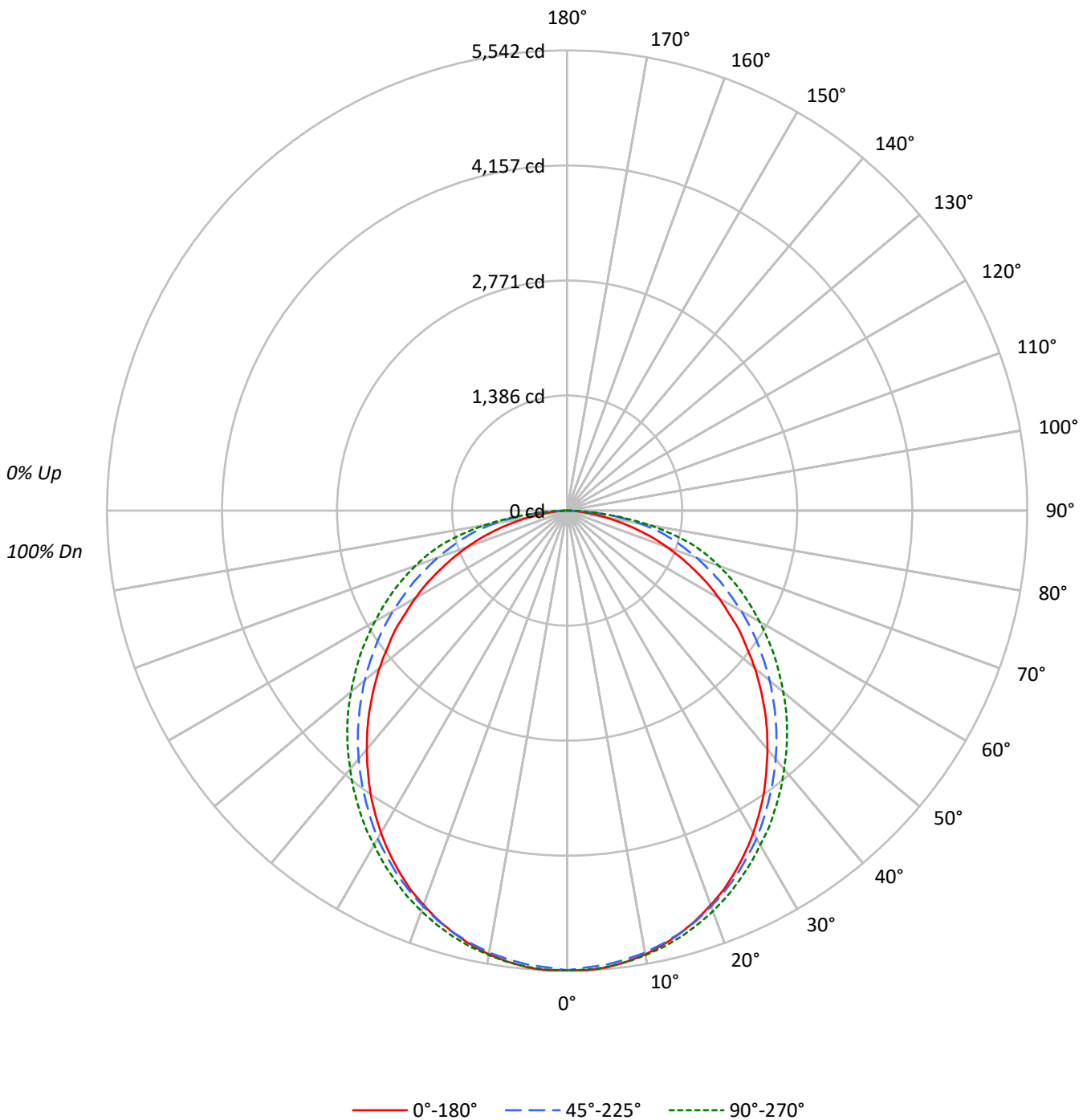
Input Watts (W): 114
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32					32			
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7447	7447	7447
5°	7457	7412	7450
10°	7416	7383	7426
15°	7339	7336	7397
20°	7238	7261	7350
25°	7118	7180	7292
30°	6968	7089	7223
35°	6793	6964	7183
40°	6592	6862	7141
45°	6393	6755	7126
50°	6177	6662	7109
55°	5957	6580	7148
60°	5684	6518	7198
65°	5381	6493	7372
70°	5021	6526	7633
75°	4468	6716	8042
80°	3653	6861	7850
85°	2573	5991	6112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	523.2	3.3
10°-20°	1490.2	9.4
20°-30°	2233.8	14.1
30°-40°	2660.5	16.8
40°-50°	2743.3	17.3
50°-60°	2503.2	15.8
60°-70°	2001.7	12.6
70°-80°	1307.5	8.2
80°-90°	392.6	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°	4247.3	26.8
0°-40°	6907.8	43.6
0°-60°	12154.3	76.7
0°-90°	15856.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15856.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5534	5534	5534	5534	5534	
5°	5521	5511	5488	5521	5516	524
15°	5269	5271	5266	5310	5310	1485
25°	4795	4803	4836	4907	4912	2207
35°	4136	4164	4240	4347	4373	2584
45°	3360	3420	3550	3698	3745	2591
55°	2539	2612	2805	2990	3047	2262
65°	1690	1805	2039	2240	2315	1676
75°	860	1003	1292	1500	1547	913
85°	167	300	388	396	396	211
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5534.5	5534.5	5534.5	5534.5	5534.5
2.5°	5542.3	5534.5	5505.8	5539.7	5534.5
5°	5521.4	5511.0	5487.6	5521.4	5516.2
7.5°	5479.8	5474.6	5451.1	5490.2	5485.0
10°	5427.7	5422.5	5404.2	5443.3	5435.5
12.5°	5354.8	5352.1	5339.1	5386.0	5380.8
15°	5268.8	5271.4	5266.2	5310.5	5310.5
17.5°	5169.8	5167.2	5177.6	5232.3	5227.1
20°	5055.2	5057.8	5070.9	5133.4	5133.4
22.5°	4935.4	4932.8	4961.5	5024.0	5029.2
25°	4794.8	4802.6	4836.5	4906.8	4912.0
27.5°	4643.7	4656.8	4698.4	4779.2	4787.0
30°	4484.9	4500.5	4563.0	4638.5	4648.9
32.5°	4310.4	4344.2	4401.5	4497.9	4523.9
35°	4135.9	4164.5	4240.0	4346.8	4372.9
37.5°	3943.1	3990.0	4076.0	4193.2	4227.0
40°	3753.0	3799.9	3906.7	4029.1	4065.5
42.5°	3560.3	3609.8	3732.2	3870.2	3909.3
45°	3359.7	3419.6	3549.9	3698.3	3745.2
47.5°	3154.0	3224.3	3365.0	3526.4	3578.5
50°	2950.8	3021.2	3182.6	3349.3	3396.2
52.5°	2732.1	2820.6	2992.5	3172.2	3219.1
55°	2539.3	2612.3	2805.0	2989.9	3047.2
57.5°	2312.8	2411.7	2617.5	2805.0	2859.7
60°	2112.2	2203.4	2422.1	2612.3	2674.8
62.5°	1909.1	2002.8	2221.6	2437.8	2495.1
65°	1690.3	1804.9	2039.3	2239.8	2315.4
67.5°	1481.9	1601.7	1841.3	2054.9	2133.0
70°	1276.2	1398.6	1659.0	1877.8	1940.3
72.5°	1073.0	1200.7	1471.5	1685.1	1758.0
75°	859.5	1002.7	1291.8	1500.2	1547.0
77.5°	658.9	817.8	1109.5	1250.1	1284.0
80°	471.4	645.9	885.5	987.1	1013.1
82.5°	309.9	479.2	661.5	716.2	708.4
85°	166.7	299.5	388.1	395.9	395.9
87.5°	65.1	119.8	122.4	93.8	88.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)