

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: P474028

Luminaire Tested: **24CZ2-75HE-S-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474028
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-S-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

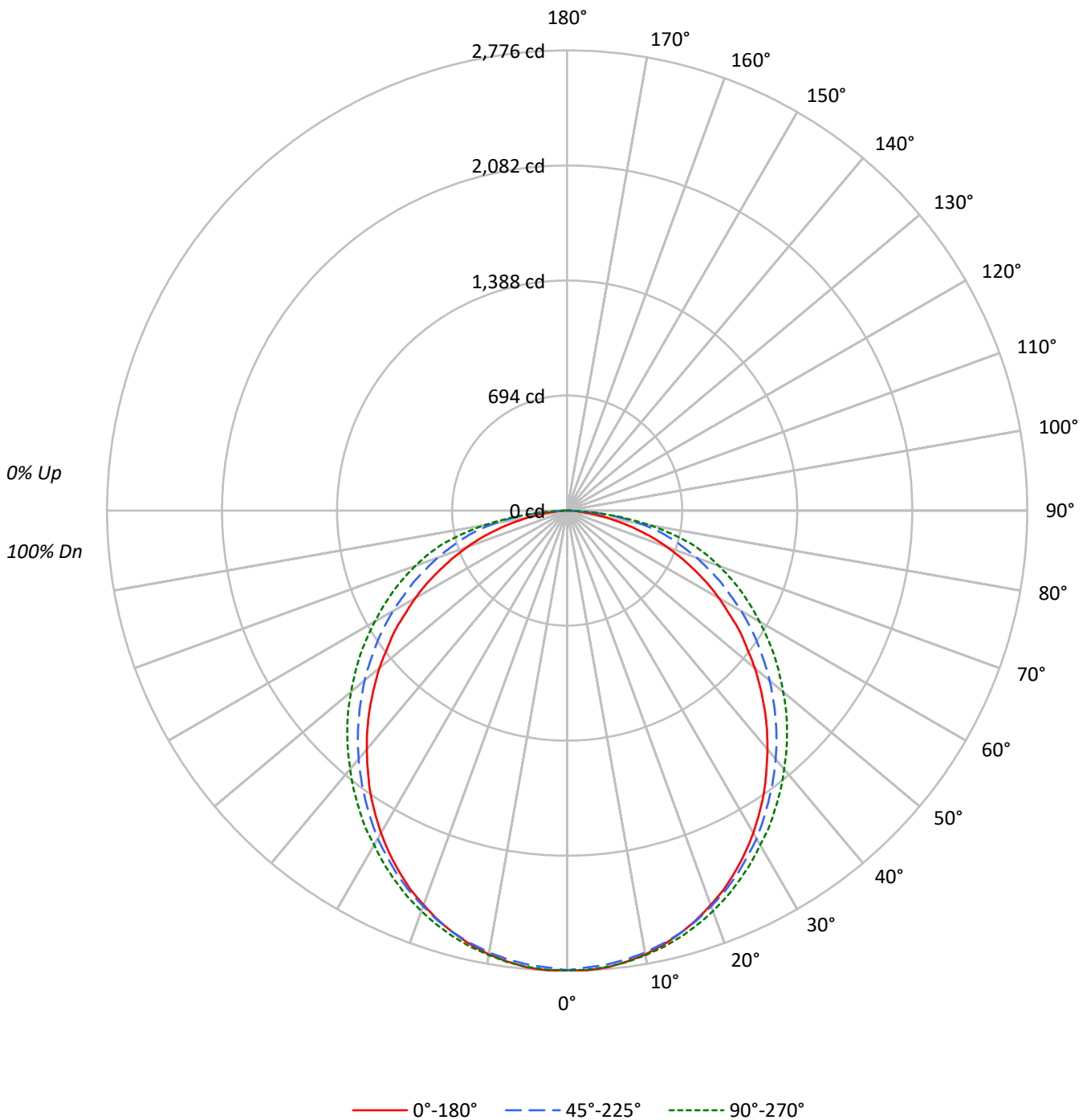
Lumens per Lamp: N/A
Luminaire Lumens: 7942.8 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 55.4
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	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3730	3730	3730
5°	3736	3713	3732
10°	3715	3699	3720
15°	3676	3675	3706
20°	3626	3637	3682
25°	3566	3597	3653
30°	3490	3551	3618
35°	3403	3489	3598
40°	3302	3437	3577
45°	3202	3384	3570
50°	3094	3337	3561
55°	2984	3296	3581
60°	2847	3265	3606
65°	2696	3252	3692
70°	2515	3270	3824
75°	2238	3364	4029
80°	1829	3437	3932
85°	1289	3001	3061



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.1	3.3
10°-20°	746.5	9.4
20°-30°	1119.0	14.1
30°-40°	1332.8	16.8
40°-50°	1374.2	17.3
50°-60°	1253.9	15.8
60°-70°	1002.7	12.6
70°-80°	654.9	8.2
80°-90°	196.7	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°	2127.6	26.8
0°-40°	3460.4	43.6
0°-60°	6088.5	76.7
0°-90°	7942.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7942.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2772	2772	2772	2772	2772	
5°	2766	2761	2749	2766	2763	262
15°	2639	2641	2638	2660	2660	744
25°	2402	2406	2423	2458	2461	1106
35°	2072	2086	2124	2178	2190	1294
45°	1683	1713	1778	1853	1876	1298
55°	1272	1309	1405	1498	1526	1133
65°	847	904	1022	1122	1160	840
75°	430	502	647	752	775	458
85°	84	150	194	198	198	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2772.4	2772.4	2772.4	2772.4	2772.4
2.5°	2776.3	2772.4	2758.0	2775.0	2772.4
5°	2765.9	2760.7	2748.9	2765.9	2763.3
7.5°	2745.0	2742.4	2730.6	2750.2	2747.6
10°	2718.9	2716.3	2707.2	2726.7	2722.8
12.5°	2682.4	2681.1	2674.5	2698.0	2695.4
15°	2639.3	2640.6	2638.0	2660.2	2660.2
17.5°	2589.7	2588.4	2593.7	2621.1	2618.4
20°	2532.3	2533.6	2540.2	2571.5	2571.5
22.5°	2472.3	2471.0	2485.4	2516.7	2519.3
25°	2401.9	2405.8	2422.7	2458.0	2460.6
27.5°	2326.2	2332.7	2353.6	2394.0	2398.0
30°	2246.6	2254.4	2285.8	2323.6	2328.8
32.5°	2159.2	2176.2	2204.9	2253.1	2266.2
35°	2071.8	2086.1	2124.0	2177.5	2190.5
37.5°	1975.2	1998.7	2041.8	2100.5	2117.5
40°	1880.0	1903.5	1957.0	2018.3	2036.6
42.5°	1783.5	1808.3	1869.6	1938.7	1958.3
45°	1683.0	1713.0	1778.2	1852.6	1876.1
47.5°	1579.9	1615.2	1685.6	1766.5	1792.6
50°	1478.2	1513.4	1594.3	1677.8	1701.3
52.5°	1368.6	1412.9	1499.0	1589.1	1612.6
55°	1272.0	1308.6	1405.1	1497.7	1526.4
57.5°	1158.5	1208.1	1311.2	1405.1	1432.5
60°	1058.1	1103.7	1213.3	1308.6	1339.9
62.5°	956.3	1003.3	1112.9	1221.2	1249.9
65°	846.7	904.1	1021.5	1122.0	1159.8
67.5°	742.3	802.4	922.4	1029.4	1068.5
70°	639.3	700.6	831.1	940.7	972.0
72.5°	537.5	601.4	737.1	844.1	880.6
75°	430.5	502.3	647.1	751.5	775.0
77.5°	330.1	409.7	555.8	626.2	643.2
80°	236.1	323.6	443.6	494.5	507.5
82.5°	155.3	240.1	331.4	358.8	354.9
85°	83.5	150.0	194.4	198.3	198.3
87.5°	32.6	60.0	61.3	47.0	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)