

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: P473774

Luminaire Tested: **24CZ2-55HE-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473774
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5521.6 lumens
Efficiency: N/A
Efficacy: 126.9 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

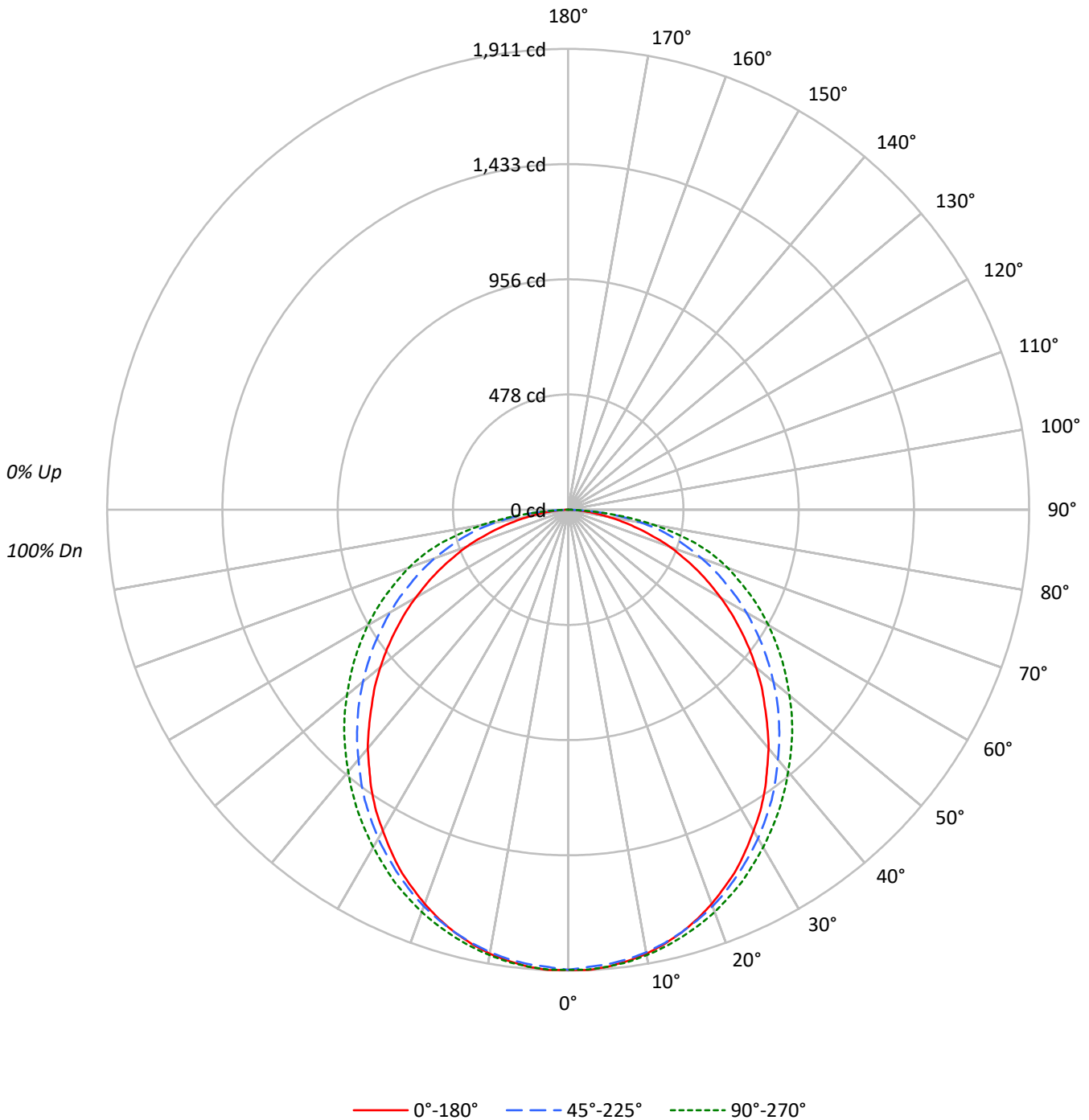
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2567	2567	2567
5°	2569	2555	2569
10°	2554	2546	2563
15°	2529	2527	2552
20°	2491	2506	2542
25°	2447	2475	2529
30°	2388	2446	2511
35°	2334	2415	2501
40°	2270	2375	2491
45°	2193	2351	2499
50°	2127	2325	2506
55°	2049	2308	2534
60°	1964	2297	2580
65°	1872	2289	2647
70°	1762	2313	2769
75°	1549	2360	2880
80°	1292	2378	2779
85°	923	2038	2066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.4	3.3
10°-20°	513.8	9.3
20°-30°	770.8	14.0
30°-40°	920.2	16.7
40°-50°	953.2	17.3
50°-60°	877.5	15.9
60°-70°	707.8	12.8
70°-80°	462.5	8.4
80°-90°	135.6	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°	1464.9	26.5
0°-40°	2385.1	43.2
0°-60°	4215.7	76.3
0°-90°	5521.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5521.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1908	1908	1908	1908	1908	
5°	1902	1900	1892	1903	1902	180
15°	1815	1815	1814	1832	1832	511
25°	1648	1652	1667	1698	1704	758
35°	1421	1434	1470	1510	1523	888
45°	1152	1181	1236	1291	1313	891
55°	873	911	984	1056	1080	782
65°	588	628	719	801	831	581
75°	298	354	454	532	554	318
85°	60	104	132	140	134	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1908.1	1908.1	1908.1	1908.1	1908.1
2.5°	1910.8	1908.1	1898.3	1909.9	1909.0
5°	1901.8	1900.0	1892.0	1902.7	1901.8
7.5°	1887.6	1886.7	1880.4	1892.0	1892.0
10°	1869.7	1867.9	1863.5	1876.9	1876.0
12.5°	1844.7	1843.8	1841.2	1857.2	1856.3
15°	1815.3	1815.3	1814.4	1832.3	1832.3
17.5°	1779.6	1780.5	1784.1	1804.6	1805.5
20°	1739.5	1743.0	1750.2	1773.4	1775.2
22.5°	1694.0	1701.1	1710.9	1736.8	1739.5
25°	1648.5	1652.1	1667.2	1697.6	1703.8
27.5°	1593.2	1602.1	1621.7	1653.0	1659.2
30°	1537.0	1549.5	1574.5	1606.6	1616.4
32.5°	1481.7	1492.4	1521.8	1558.4	1570.0
35°	1421.0	1433.5	1470.1	1510.2	1522.7
37.5°	1354.1	1373.7	1412.1	1458.5	1471.9
40°	1292.6	1310.4	1352.3	1404.1	1418.3
42.5°	1222.1	1244.4	1295.2	1347.9	1365.7
45°	1152.5	1181.1	1235.5	1290.8	1313.1
47.5°	1087.4	1110.6	1174.8	1237.3	1256.9
50°	1016.0	1042.8	1110.6	1176.6	1197.1
52.5°	945.6	977.7	1046.4	1115.9	1138.2
55°	873.3	910.8	983.9	1056.2	1080.3
57.5°	803.7	841.2	917.0	993.7	1018.7
60°	729.7	769.8	853.7	927.7	958.9
62.5°	658.3	698.5	786.8	867.1	896.5
65°	587.9	628.0	719.0	801.1	831.4
67.5°	514.7	558.4	655.6	735.0	764.5
70°	447.8	489.7	587.9	672.6	703.8
72.5°	371.1	421.0	521.0	604.8	634.2
75°	297.9	354.1	454.0	532.5	554.0
77.5°	230.1	286.3	386.3	445.1	458.5
80°	166.8	223.9	306.9	347.9	358.6
82.5°	107.9	166.8	222.1	249.8	253.3
85°	59.8	103.5	132.0	140.1	133.8
87.5°	21.4	39.2	38.4	31.2	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)