

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: P276340

Luminaire Tested: **24CZ2-55HE-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276340
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55HE-S-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5848.0 lumens
Efficiency: N/A
Efficacy: 139.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

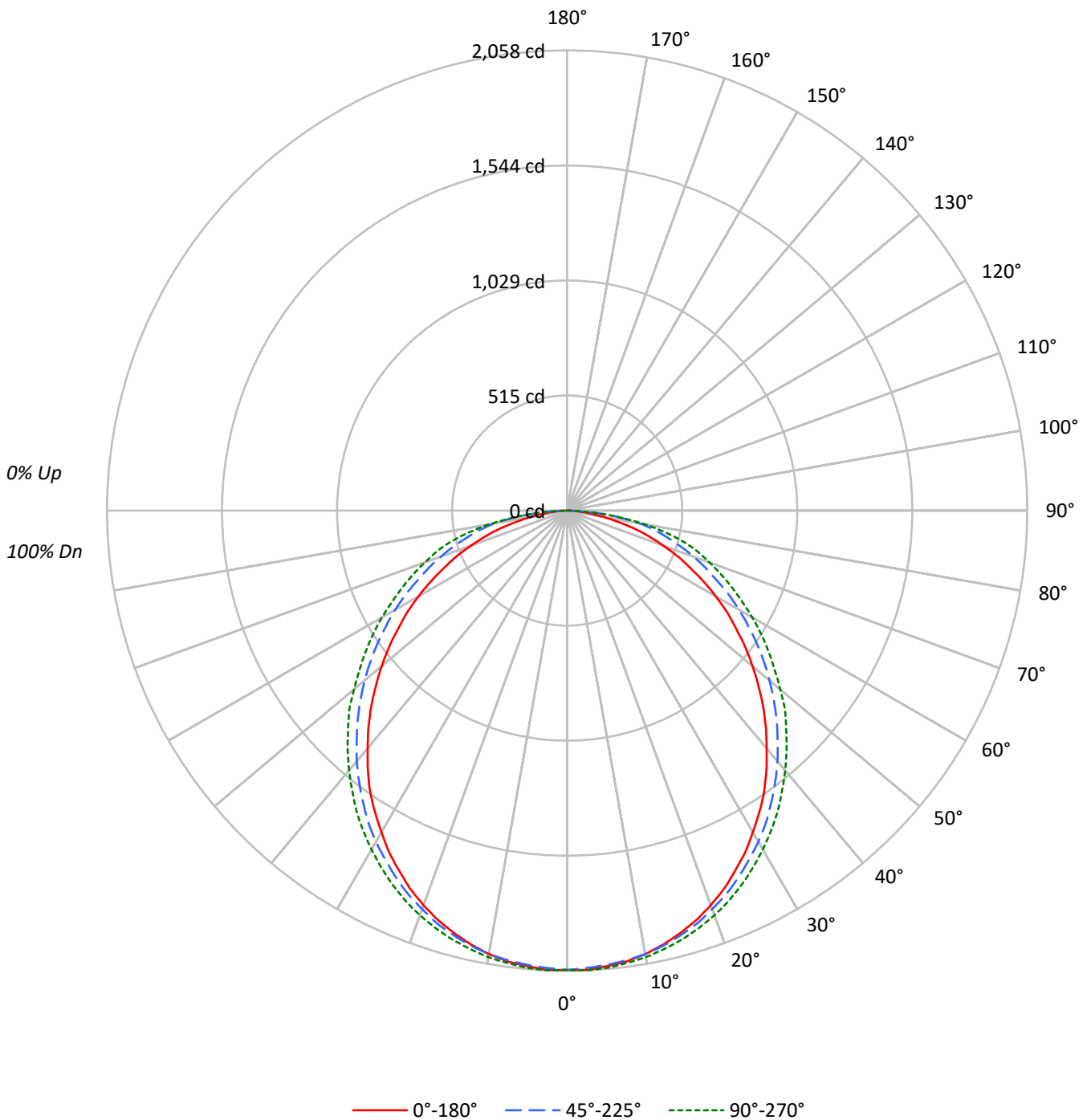
Input Watts (W): 42.047067
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2764	2764	2764
5°	2762	2755	2772
10°	2751	2751	2771
15°	2725	2738	2766
20°	2689	2715	2758
25°	2639	2689	2741
30°	2580	2658	2719
35°	2523	2615	2697
40°	2437	2571	2666
45°	2358	2520	2637
50°	2267	2473	2605
55°	2166	2427	2580
60°	2065	2389	2574
65°	1934	2348	2590
70°	1790	2360	2660
75°	1603	2404	2810
80°	1296	2548	2749
85°	976	2237	2180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	3.3
10°-20°	555.7	9.5
20°-30°	835.4	14.3
30°-40°	995.1	17.0
40°-50°	1018.4	17.4
50°-60°	916.9	15.7
60°-70°	720.1	12.3
70°-80°	467.3	8.0
80°-90°	144.5	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°	1585.6	27.1
0°-40°	2580.7	44.1
0°-60°	4516.1	77.2
0°-90°	5848.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5848.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2054	2054	2054	2054	2054	
5°	2045	2049	2040	2051	2053	194
15°	1956	1962	1965	1982	1986	552
25°	1778	1792	1811	1841	1846	819
35°	1536	1555	1592	1631	1642	958
45°	1239	1269	1324	1375	1386	955
55°	923	964	1035	1088	1100	828
65°	607	654	737	799	814	605
75°	308	368	462	526	540	326
85°	63	117	145	141	141	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2054.4	2054.4	2054.4	2054.4	2054.4
2.5°	2056.3	2056.3	2047.0	2056.3	2058.2
5°	2045.2	2048.9	2039.6	2050.7	2052.6
7.5°	2034.0	2034.0	2028.4	2039.6	2041.4
10°	2013.6	2015.4	2013.6	2026.6	2028.4
12.5°	1987.6	1991.3	1993.1	2006.1	2008.0
15°	1956.0	1961.6	1965.3	1982.0	1985.7
17.5°	1920.7	1926.3	1935.6	1954.1	1957.8
20°	1878.0	1885.4	1896.5	1920.7	1926.3
22.5°	1831.5	1839.0	1857.5	1879.8	1889.1
25°	1777.7	1792.5	1811.1	1840.8	1846.4
27.5°	1723.8	1736.8	1760.9	1792.5	1800.0
30°	1660.6	1681.1	1710.8	1742.4	1749.8
32.5°	1599.3	1619.8	1655.1	1688.5	1697.8
35°	1536.2	1554.8	1591.9	1630.9	1642.1
37.5°	1463.7	1487.9	1528.8	1567.8	1578.9
40°	1387.6	1417.3	1463.7	1504.6	1517.6
42.5°	1315.1	1346.7	1393.2	1437.7	1452.6
45°	1239.0	1268.7	1324.4	1374.6	1385.7
47.5°	1161.0	1194.4	1253.8	1304.0	1322.6
50°	1082.9	1118.2	1181.4	1233.4	1244.6
52.5°	1004.9	1042.1	1109.0	1164.7	1170.3
55°	923.2	964.1	1034.7	1088.5	1099.7
57.5°	848.9	884.2	960.3	1016.1	1029.1
60°	767.2	806.2	887.9	939.9	956.6
62.5°	689.1	730.0	815.5	867.5	882.3
65°	607.4	653.9	737.4	798.7	813.6
67.5°	536.8	581.4	670.6	730.0	744.9
70°	455.1	505.3	600.0	661.3	676.1
72.5°	384.5	436.5	531.3	590.7	613.0
75°	308.4	367.8	462.5	525.7	540.5
77.5°	234.1	302.8	399.4	447.7	447.7
80°	167.2	239.6	328.8	351.1	354.8
82.5°	109.6	180.2	243.3	241.5	241.5
85°	63.2	117.0	144.9	141.2	141.2
87.5°	24.1	48.3	52.0	52.0	50.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)