

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: P276511

Luminaire Tested: **24CZ2-55HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276511
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-L82765-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: 5604.1 lumens
Efficiency: N/A
Efficacy: 137.3 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

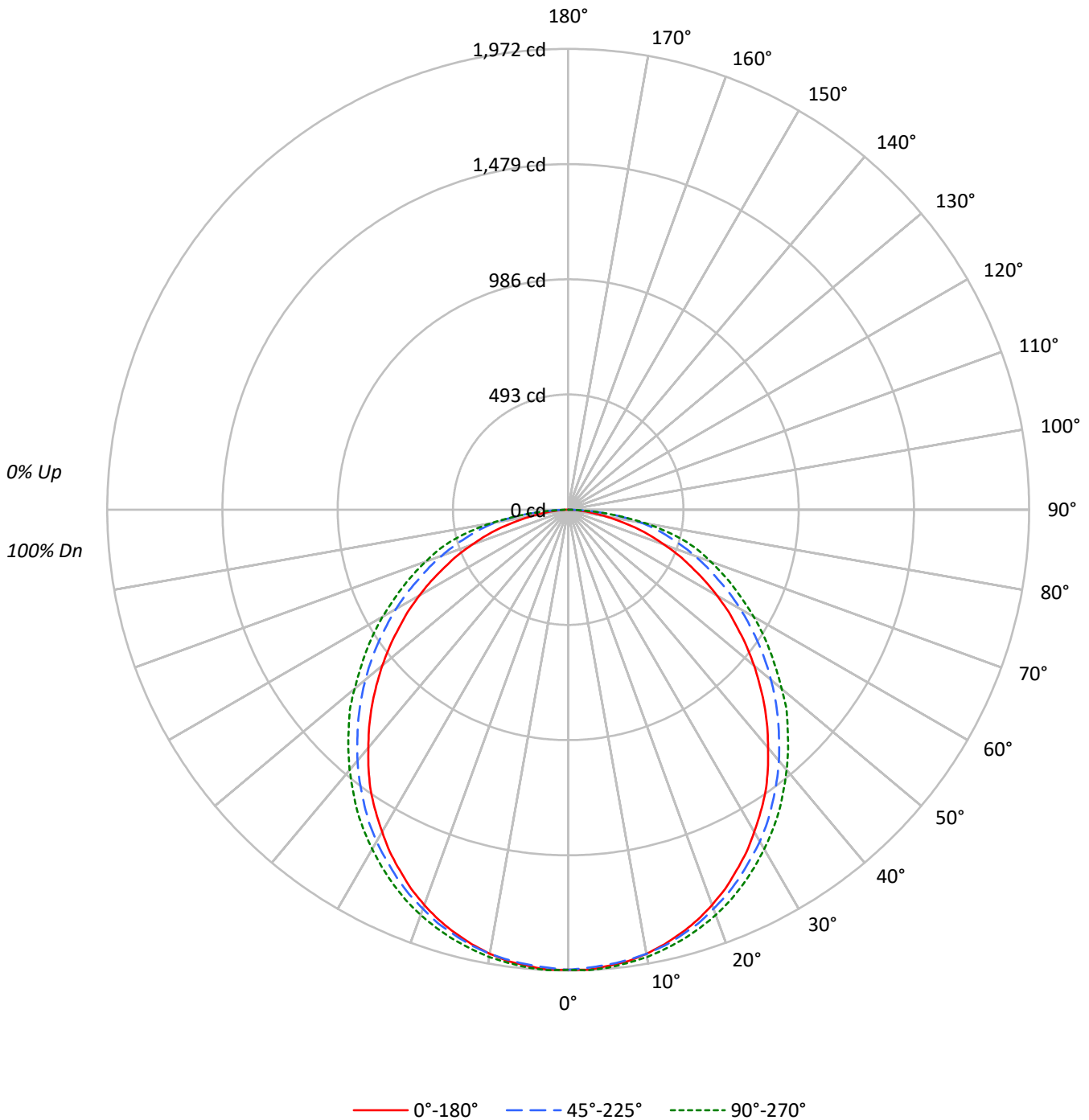
Input Watts (W): 40.827
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2649	2649	2649
5°	2647	2640	2657
10°	2636	2636	2656
15°	2611	2623	2651
20°	2577	2602	2643
25°	2529	2577	2627
30°	2472	2547	2605
35°	2418	2506	2585
40°	2336	2464	2554
45°	2259	2415	2527
50°	2172	2370	2497
55°	2075	2326	2472
60°	1978	2290	2467
65°	1853	2250	2482
70°	1716	2262	2549
75°	1536	2304	2693
80°	1241	2442	2634
85°	934	2143	2089



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.4	3.3
10°-20°	532.6	9.5
20°-30°	800.6	14.3
30°-40°	953.6	17.0
40°-50°	976.0	17.4
50°-60°	878.7	15.7
60°-70°	690.0	12.3
70°-80°	447.8	8.0
80°-90°	138.5	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°	1519.5	27.1
0°-40°	2473.1	44.1
0°-60°	4327.8	77.2
0°-90°	5604.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5604.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1969	1969	1969	1969	1969	
5°	1960	1963	1954	1965	1967	186
15°	1874	1880	1883	1899	1903	529
25°	1704	1718	1736	1764	1769	785
35°	1472	1490	1526	1563	1574	918
45°	1187	1216	1269	1317	1328	915
55°	885	924	992	1043	1054	793
65°	582	627	707	765	780	579
75°	296	352	443	504	518	313
85°	60	112	139	135	135	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1968.8	1968.8	1968.8	1968.8	1968.8
2.5°	1970.6	1970.6	1961.7	1970.6	1972.3
5°	1959.9	1963.4	1954.5	1965.2	1967.0
7.5°	1949.2	1949.2	1943.8	1954.5	1956.3
10°	1929.6	1931.4	1929.6	1942.1	1943.8
12.5°	1904.7	1908.2	1910.0	1922.5	1924.3
15°	1874.4	1879.8	1883.3	1899.3	1902.9
17.5°	1840.6	1845.9	1854.8	1872.6	1876.2
20°	1799.7	1806.8	1817.5	1840.6	1845.9
22.5°	1755.2	1762.3	1780.1	1801.4	1810.3
25°	1703.5	1717.8	1735.6	1764.1	1769.4
27.5°	1651.9	1664.4	1687.5	1717.8	1724.9
30°	1591.4	1611.0	1639.5	1669.7	1676.8
32.5°	1532.7	1552.2	1586.1	1618.1	1627.0
35°	1472.1	1489.9	1525.5	1562.9	1573.6
37.5°	1402.7	1425.8	1465.0	1502.4	1513.1
40°	1329.7	1358.2	1402.7	1441.9	1454.3
42.5°	1260.3	1290.6	1335.1	1377.8	1392.0
45°	1187.3	1215.8	1269.2	1317.3	1327.9
47.5°	1112.6	1144.6	1201.6	1249.6	1267.4
50°	1037.8	1071.6	1132.1	1182.0	1192.7
52.5°	963.0	998.6	1062.7	1116.1	1121.5
55°	884.7	923.9	991.5	1043.1	1053.8
57.5°	813.5	847.3	920.3	973.7	986.2
60°	735.2	772.6	850.9	900.7	916.7
62.5°	660.4	699.6	781.5	831.3	845.5
65°	582.1	626.6	706.7	765.4	779.7
67.5°	514.4	557.2	642.6	699.6	713.8
70°	436.1	484.2	575.0	633.7	647.9
72.5°	368.5	418.3	509.1	566.1	587.4
75°	295.5	352.5	443.2	503.8	518.0
77.5°	224.3	290.2	382.7	429.0	429.0
80°	160.2	229.6	315.1	336.4	340.0
82.5°	105.0	172.7	233.2	231.4	231.4
85°	60.5	112.1	138.8	135.3	135.3
87.5°	23.1	46.3	49.8	49.8	48.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)