

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: P276517

Luminaire Tested: **24CZ2-60HE-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276517
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: 24CZ2-60HE-S-UNV-L82765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5660.8 lumens
Efficiency: N/A
Efficacy: 128.7 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

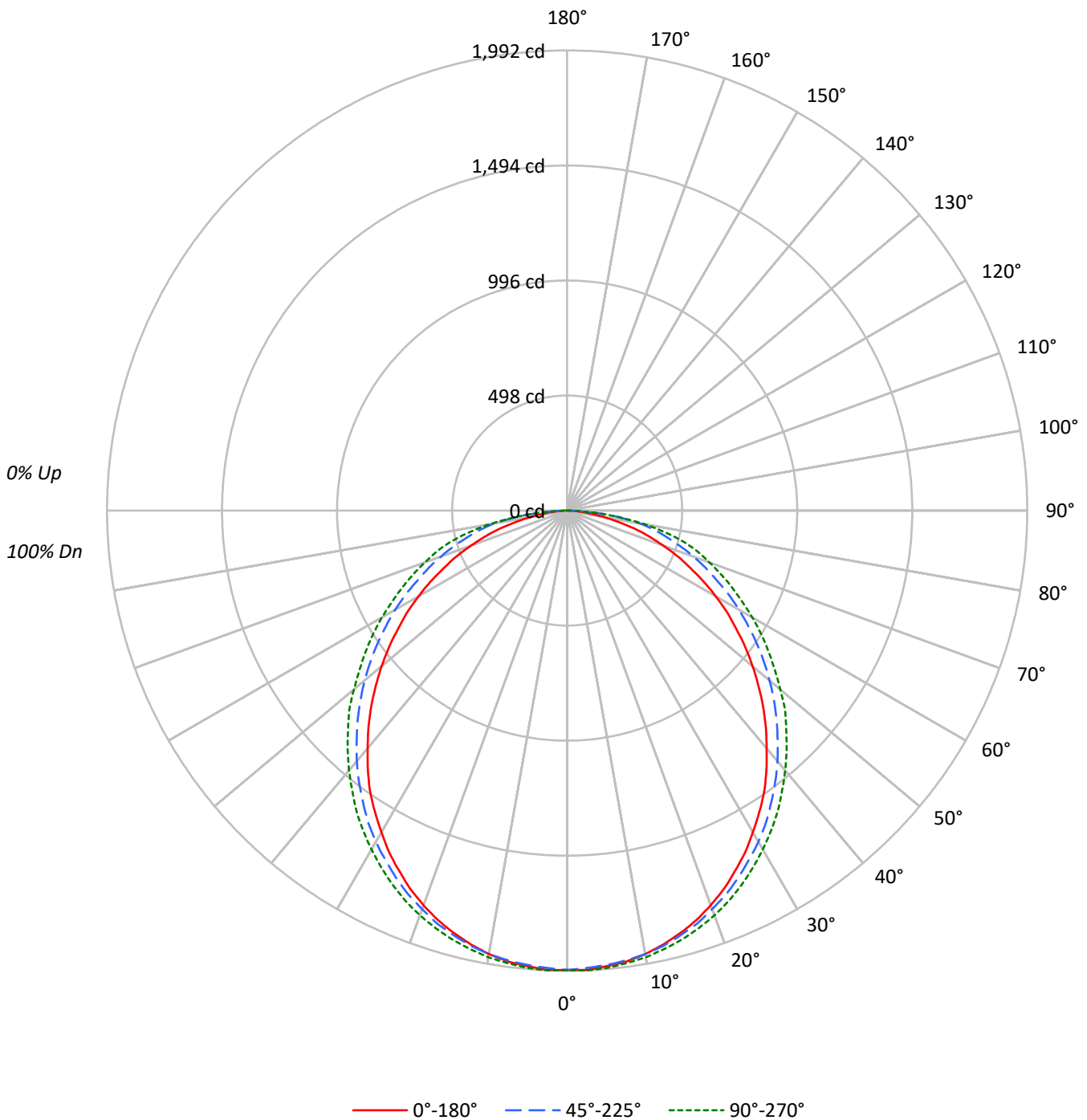
Input Watts (W): 43.989
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2676	2676	2676
5°	2674	2667	2684
10°	2663	2663	2683
15°	2637	2650	2677
20°	2603	2629	2670
25°	2555	2603	2653
30°	2497	2573	2632
35°	2442	2531	2611
40°	2359	2489	2580
45°	2282	2439	2552
50°	2194	2394	2522
55°	2096	2349	2497
60°	1998	2313	2492
65°	1872	2273	2507
70°	1733	2285	2575
75°	1552	2327	2720
80°	1254	2466	2661
85°	943	2166	2110



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.3	3.3
10°-20°	538.0	9.5
20°-30°	808.7	14.3
30°-40°	963.3	17.0
40°-50°	985.8	17.4
50°-60°	887.5	15.7
60°-70°	697.0	12.3
70°-80°	452.4	8.0
80°-90°	139.9	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°	1534.9	27.1
0°-40°	2498.1	44.1
0°-60°	4371.5	77.2
0°-90°	5660.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5660.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1989	1989	1989	1989	1989	
5°	1980	1983	1974	1985	1987	188
15°	1893	1899	1902	1919	1922	534
25°	1721	1735	1753	1782	1787	793
35°	1487	1505	1541	1579	1590	928
45°	1199	1228	1282	1331	1341	925
55°	894	933	1002	1054	1064	801
65°	588	633	714	773	788	585
75°	298	356	448	509	523	316
85°	61	113	140	137	137	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1988.7	1988.7	1988.7	1988.7	1988.7
2.5°	1990.5	1990.5	1981.5	1990.5	1992.3
5°	1979.7	1983.3	1974.3	1985.1	1986.9
7.5°	1968.9	1968.9	1963.5	1974.3	1976.1
10°	1949.1	1950.9	1949.1	1961.7	1963.5
12.5°	1923.9	1927.5	1929.3	1941.9	1943.7
15°	1893.4	1898.8	1902.4	1918.6	1922.1
17.5°	1859.2	1864.6	1873.6	1891.6	1895.2
20°	1817.9	1825.1	1835.8	1859.2	1864.6
22.5°	1772.9	1780.1	1798.1	1819.7	1828.6
25°	1720.8	1735.1	1753.1	1781.9	1787.3
27.5°	1668.6	1681.2	1704.6	1735.1	1742.3
30°	1607.5	1627.3	1656.0	1686.6	1693.8
32.5°	1548.1	1567.9	1602.1	1634.5	1643.4
35°	1487.0	1505.0	1541.0	1578.7	1589.5
37.5°	1416.9	1440.3	1479.8	1517.6	1528.4
40°	1343.2	1371.9	1416.9	1456.4	1469.0
42.5°	1273.0	1303.6	1348.6	1391.7	1406.1
45°	1199.3	1228.1	1282.0	1330.6	1341.4
47.5°	1123.8	1156.2	1213.7	1262.3	1280.2
50°	1048.3	1082.4	1143.6	1193.9	1204.7
52.5°	972.8	1008.7	1073.5	1127.4	1132.8
55°	893.6	933.2	1001.5	1053.7	1064.5
57.5°	821.7	855.9	929.6	983.5	996.1
60°	742.6	780.4	859.5	909.8	926.0
62.5°	667.1	706.6	789.4	839.7	854.1
65°	588.0	632.9	713.8	773.2	787.6
67.5°	519.6	562.8	649.1	706.6	721.0
70°	440.5	489.1	580.8	640.1	654.5
72.5°	372.2	422.5	514.3	571.8	593.4
75°	298.5	356.0	447.7	508.9	523.2
77.5°	226.6	293.1	386.6	433.3	433.3
80°	161.8	232.0	318.3	339.8	343.4
82.5°	106.1	174.4	235.5	233.8	233.8
85°	61.1	113.3	140.3	136.7	136.7
87.5°	23.4	46.8	50.3	50.3	48.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)