

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: P276103

Luminaire Tested: **24CZ2-60HE-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276103
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-UNV-L82765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5949.4 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

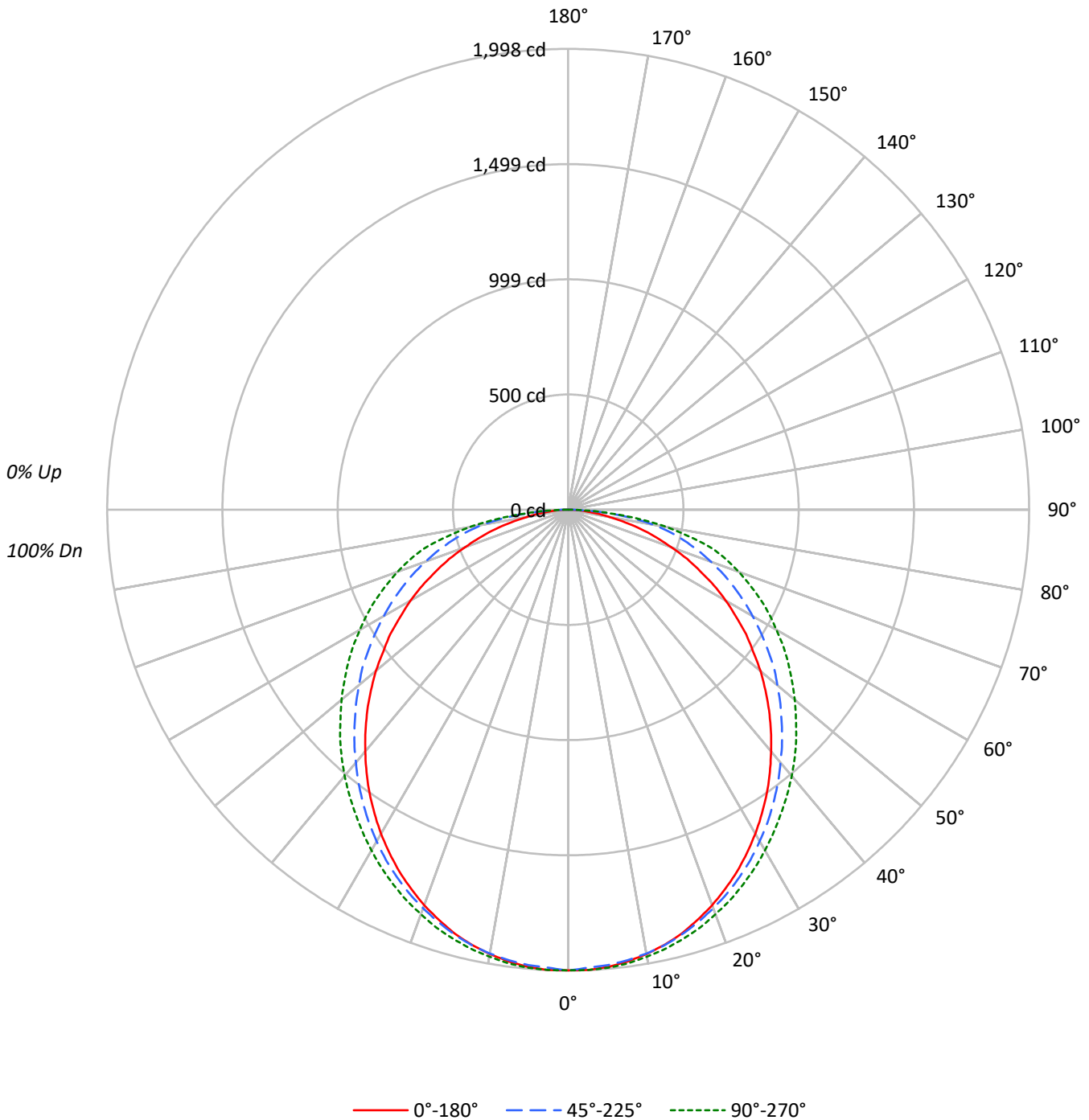
Input Watts (W): 45.477
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2688	2688	2688
5°	2687	2676	2692
10°	2672	2669	2688
15°	2650	2655	2683
20°	2613	2633	2672
25°	2570	2609	2662
30°	2520	2579	2650
35°	2466	2547	2642
40°	2403	2514	2647
45°	2343	2490	2660
50°	2278	2477	2685
55°	2208	2473	2734
60°	2121	2485	2805
65°	2010	2522	2927
70°	1867	2585	3093
75°	1703	2715	3355
80°	1400	2923	3354
85°	1073	2697	2881



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.9	3.2
10°-20°	539.3	9.1
20°-30°	811.6	13.6
30°-40°	972.6	16.3
40°-50°	1013.6	17.0
50°-60°	943.0	15.9
60°-70°	776.7	13.1
70°-80°	529.0	8.9
80°-90°	174.6	2.9
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°	1539.9	25.9
0°-40°	2512.5	42.2
0°-60°	4469.1	75.1
0°-90°	5949.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5949.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1998	1998	1998	1998	1998	
5°	1990	1990	1982	1992	1994	189
15°	1902	1904	1906	1924	1926	536
25°	1731	1739	1757	1787	1793	797
35°	1501	1519	1551	1592	1608	938
45°	1231	1257	1308	1374	1398	949
55°	941	973	1054	1138	1166	839
65°	631	685	792	886	919	627
75°	328	401	522	616	645	345
85°	70	135	175	187	187	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1997.5	1997.5	1997.5	1997.5	1997.5
2.5°	1997.5	1997.5	1987.6	1997.5	1997.5
5°	1989.5	1989.5	1981.6	1991.5	1993.5
7.5°	1975.6	1977.6	1969.7	1981.6	1983.6
10°	1955.8	1957.8	1953.8	1965.7	1967.7
12.5°	1932.0	1933.9	1933.9	1947.8	1949.8
15°	1902.2	1904.2	1906.2	1924.0	1926.0
17.5°	1864.5	1870.4	1874.4	1896.2	1900.2
20°	1824.7	1830.7	1838.6	1862.5	1866.4
22.5°	1779.1	1787.0	1800.9	1826.7	1832.7
25°	1731.4	1739.4	1757.2	1787.0	1793.0
27.5°	1677.8	1689.7	1711.6	1743.3	1751.3
30°	1622.2	1634.1	1659.9	1693.7	1705.6
32.5°	1562.6	1578.5	1608.3	1646.0	1658.0
35°	1501.1	1519.0	1550.7	1592.4	1608.3
37.5°	1435.6	1455.4	1493.2	1538.8	1558.7
40°	1368.1	1391.9	1431.6	1485.2	1507.1
42.5°	1300.6	1322.4	1372.0	1429.6	1453.4
45°	1231.1	1256.9	1308.5	1374.0	1397.8
47.5°	1159.6	1185.4	1246.9	1316.4	1338.3
50°	1088.1	1113.9	1183.4	1256.9	1282.7
52.5°	1010.7	1044.4	1123.8	1197.3	1223.1
55°	941.2	972.9	1054.3	1137.7	1165.5
57.5°	861.7	899.5	988.8	1076.2	1106.0
60°	788.3	828.0	923.3	1012.6	1042.4
62.5°	712.8	756.5	857.8	949.1	982.9
65°	631.4	685.0	792.2	885.6	919.3
67.5°	557.9	613.5	726.7	822.0	851.8
70°	474.6	542.1	657.2	752.5	786.3
72.5°	403.1	470.6	591.7	685.0	718.8
75°	327.6	401.1	522.2	615.5	645.3
77.5°	252.2	333.6	454.7	526.2	536.1
80°	180.7	266.1	377.3	419.0	432.9
82.5°	127.1	204.5	278.0	305.8	313.7
85°	69.5	135.0	174.7	186.6	186.6
87.5°	29.8	57.6	69.5	71.5	73.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)