

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: P276102

Luminaire Tested: **24CZ2-60HE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276102
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-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5933.3 lumens
Efficiency: N/A
Efficacy: 130.5 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

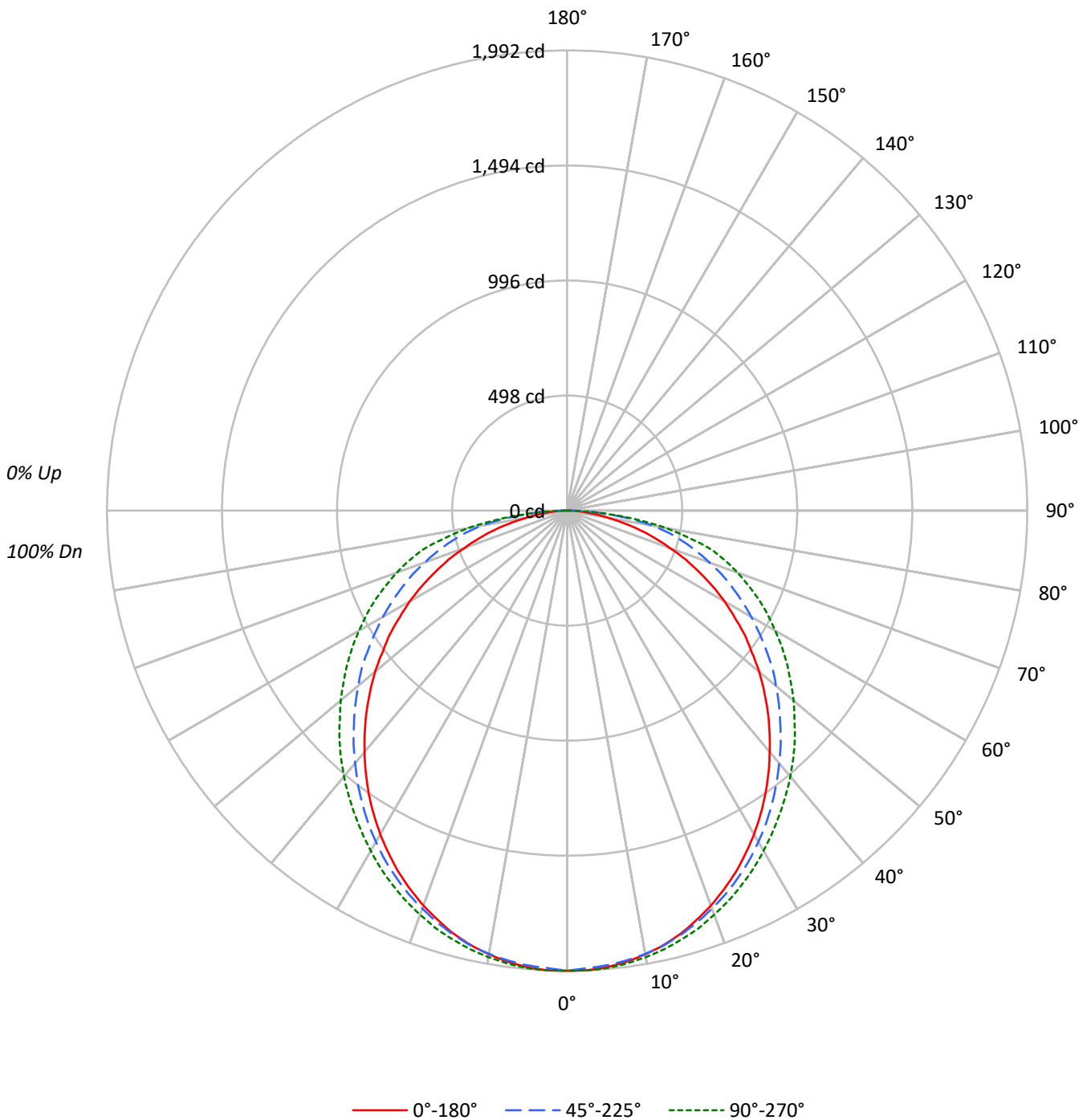
Input Watts (W): 45.477
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2680	2680	2680
5°	2680	2669	2685
10°	2665	2662	2681
15°	2642	2648	2676
20°	2606	2626	2665
25°	2563	2602	2655
30°	2513	2572	2643
35°	2459	2540	2635
40°	2396	2508	2640
45°	2336	2483	2653
50°	2272	2470	2678
55°	2202	2467	2727
60°	2115	2478	2798
65°	2005	2515	2919
70°	1862	2578	3085
75°	1698	2707	3346
80°	1396	2915	3345
85°	1070	2691	2873



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.4	3.2
10°-20°	537.9	9.1
20°-30°	809.4	13.6
30°-40°	970.0	16.3
40°-50°	1010.8	17.0
50°-60°	940.5	15.9
60°-70°	774.6	13.1
70°-80°	527.5	8.9
80°-90°	174.2	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°	1535.7	25.9
0°-40°	2505.7	42.2
0°-60°	4457.0	75.1
0°-90°	5933.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5933.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1992	1992	1992	1992	1992	
5°	1984	1984	1976	1986	1988	188
15°	1897	1899	1901	1919	1921	534
25°	1727	1735	1752	1782	1788	795
35°	1497	1515	1546	1588	1604	936
45°	1228	1254	1305	1370	1394	947
55°	939	970	1052	1135	1162	837
65°	630	683	790	883	917	625
75°	327	400	521	614	644	345
85°	69	135	174	186	186	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1992.1	1992.1	1992.1	1992.1	1992.1
2.5°	1992.1	1992.1	1982.2	1992.1	1992.1
5°	1984.2	1984.2	1976.2	1986.1	1988.1
7.5°	1970.3	1972.3	1964.4	1976.2	1978.2
10°	1950.5	1952.5	1948.5	1960.4	1962.4
12.5°	1926.7	1928.7	1928.7	1942.6	1944.6
15°	1897.0	1899.0	1901.0	1918.8	1920.8
17.5°	1859.4	1865.4	1869.3	1891.1	1895.1
20°	1819.8	1825.8	1833.7	1857.4	1861.4
22.5°	1774.3	1782.2	1796.0	1821.8	1827.7
25°	1726.7	1734.7	1752.5	1782.2	1788.1
27.5°	1673.3	1685.2	1706.9	1738.6	1746.5
30°	1617.8	1629.7	1655.5	1689.1	1701.0
32.5°	1558.4	1574.3	1604.0	1641.6	1653.5
35°	1497.0	1514.9	1546.5	1588.1	1604.0
37.5°	1431.7	1451.5	1489.1	1534.7	1554.5
40°	1364.4	1388.1	1427.7	1481.2	1503.0
42.5°	1297.0	1318.8	1368.3	1425.7	1449.5
45°	1227.7	1253.5	1305.0	1370.3	1394.1
47.5°	1156.4	1182.2	1243.6	1312.9	1334.7
50°	1085.2	1110.9	1180.2	1253.5	1279.2
52.5°	1007.9	1041.6	1120.8	1194.1	1219.8
55°	938.6	970.3	1051.5	1134.7	1162.4
57.5°	859.4	897.0	986.1	1073.3	1103.0
60°	786.1	825.7	920.8	1009.9	1039.6
62.5°	710.9	754.5	855.4	946.5	980.2
65°	629.7	683.2	790.1	883.2	916.8
67.5°	556.4	611.9	724.8	819.8	849.5
70°	473.3	540.6	655.4	750.5	784.2
72.5°	402.0	469.3	590.1	683.2	716.8
75°	326.7	400.0	520.8	613.9	643.6
77.5°	251.5	332.7	453.5	524.8	534.7
80°	180.2	265.3	376.2	417.8	431.7
82.5°	126.7	204.0	277.2	305.0	312.9
85°	69.3	134.7	174.3	186.1	186.1
87.5°	29.7	57.4	69.3	71.3	73.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)