

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: P276521

Luminaire Tested: **24CZ2-60HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276521
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-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6173.7 lumens
Efficiency: N/A
Efficacy: 136.3 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

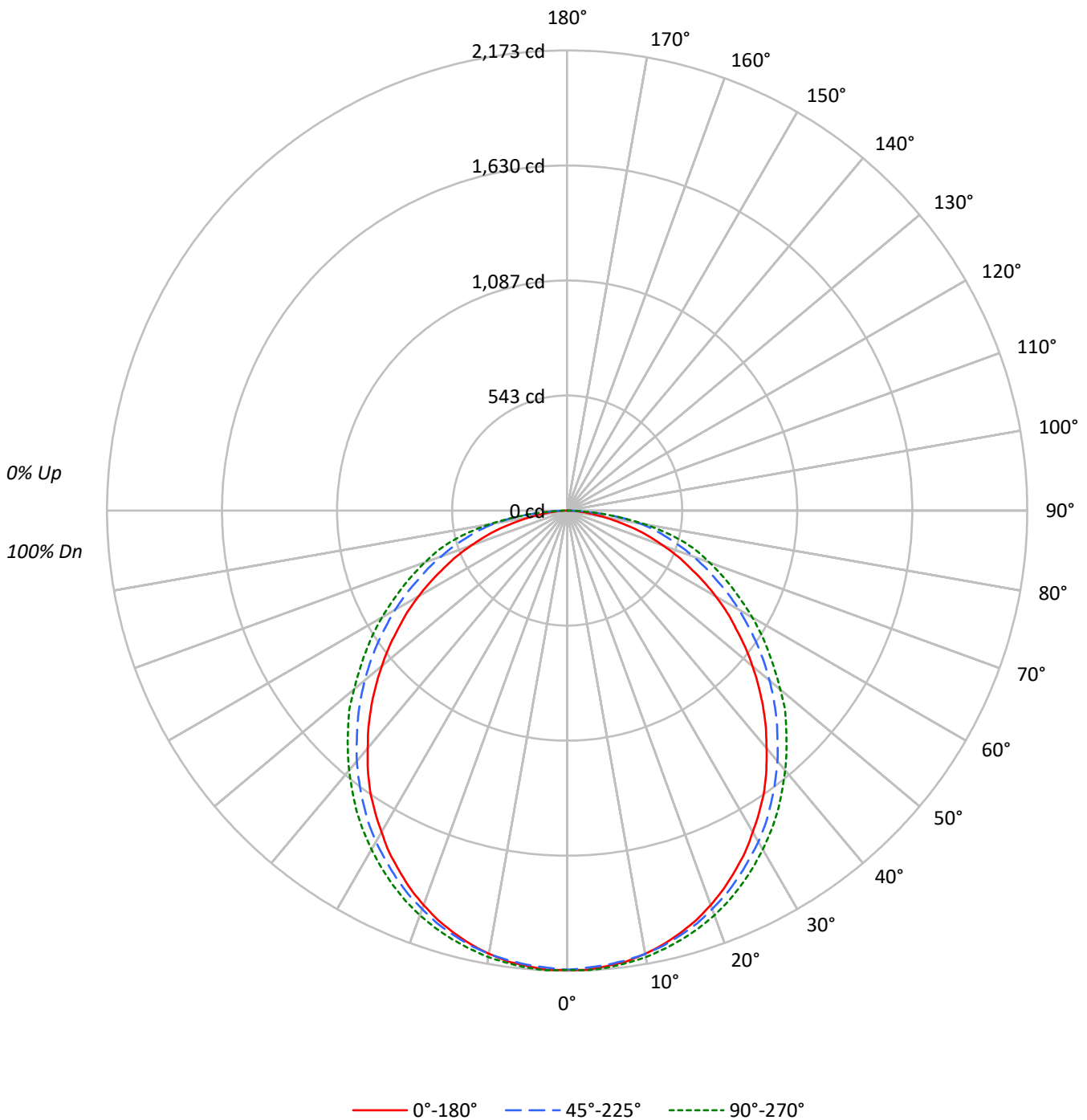
Input Watts (W): 45.291
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2918	2918	2918
5°	2916	2908	2927
10°	2904	2904	2926
15°	2876	2890	2920
20°	2839	2867	2912
25°	2786	2839	2894
30°	2724	2806	2870
35°	2664	2760	2847
40°	2573	2714	2814
45°	2489	2661	2784
50°	2393	2611	2750
55°	2286	2562	2723
60°	2179	2523	2718
65°	2041	2479	2734
70°	1890	2492	2808
75°	1692	2538	2966
80°	1368	2689	2903
85°	1030	2362	2300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.3	3.3
10°-20°	586.7	9.5
20°-30°	881.9	14.3
30°-40°	1050.5	17.0
40°-50°	1075.2	17.4
50°-60°	968.0	15.7
60°-70°	760.2	12.3
70°-80°	493.3	8.0
80°-90°	152.6	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°	1674.0	27.1
0°-40°	2724.5	44.1
0°-60°	4767.6	77.2
0°-90°	6173.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6173.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2169	2169	2169	2169	2169	
5°	2159	2163	2153	2165	2167	205
15°	2065	2071	2075	2092	2096	582
25°	1877	1892	1912	1943	1949	865
35°	1622	1641	1681	1722	1734	1012
45°	1308	1339	1398	1451	1463	1008
55°	975	1018	1092	1149	1161	874
65°	641	690	778	843	859	638
75°	326	388	488	555	571	344
85°	67	124	153	149	149	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2168.9	2168.9	2168.9	2168.9	2168.9
2.5°	2170.8	2170.8	2161.0	2170.8	2172.8
5°	2159.1	2163.0	2153.2	2164.9	2166.9
7.5°	2147.3	2147.3	2141.4	2153.2	2155.1
10°	2125.7	2127.7	2125.7	2139.4	2141.4
12.5°	2098.3	2102.2	2104.1	2117.9	2119.8
15°	2064.9	2070.8	2074.7	2092.4	2096.3
17.5°	2027.7	2033.6	2043.4	2063.0	2066.9
20°	1982.6	1990.4	2002.2	2027.7	2033.6
22.5°	1933.5	1941.4	1961.0	1984.5	1994.3
25°	1876.7	1892.4	1912.0	1943.3	1949.2
27.5°	1819.8	1833.5	1859.0	1892.4	1900.2
30°	1753.1	1774.7	1806.1	1839.4	1847.3
32.5°	1688.4	1710.0	1747.2	1782.5	1792.3
35°	1621.7	1641.4	1680.6	1721.8	1733.5
37.5°	1545.3	1570.8	1613.9	1655.1	1666.8
40°	1464.9	1496.2	1545.3	1588.4	1602.1
42.5°	1388.4	1421.7	1470.7	1517.8	1533.5
45°	1308.0	1339.4	1398.2	1451.1	1462.9
47.5°	1225.6	1260.9	1323.7	1376.6	1396.2
50°	1143.3	1180.5	1247.2	1302.1	1313.9
52.5°	1060.9	1100.1	1170.7	1229.5	1235.4
55°	974.6	1017.8	1092.3	1149.1	1160.9
57.5°	896.2	933.4	1013.8	1072.7	1086.4
60°	809.9	851.1	937.4	992.3	1009.9
62.5°	727.5	770.7	860.9	915.8	931.5
65°	641.2	690.3	778.5	843.2	858.9
67.5°	566.7	613.8	707.9	770.7	786.4
70°	480.4	533.4	633.4	698.1	713.8
72.5°	405.9	460.8	560.8	623.6	647.1
75°	325.5	388.3	488.3	555.0	570.6
77.5°	247.1	319.6	421.6	472.6	472.6
80°	176.5	253.0	347.1	370.6	374.6
82.5°	115.7	190.2	256.9	254.9	254.9
85°	66.7	123.5	153.0	149.0	149.0
87.5°	25.5	51.0	54.9	54.9	52.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)