

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: P276524

Luminaire Tested: **24CZ2-60HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276524
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-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6267.2 lumens
Efficiency: N/A
Efficacy: 135.6 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

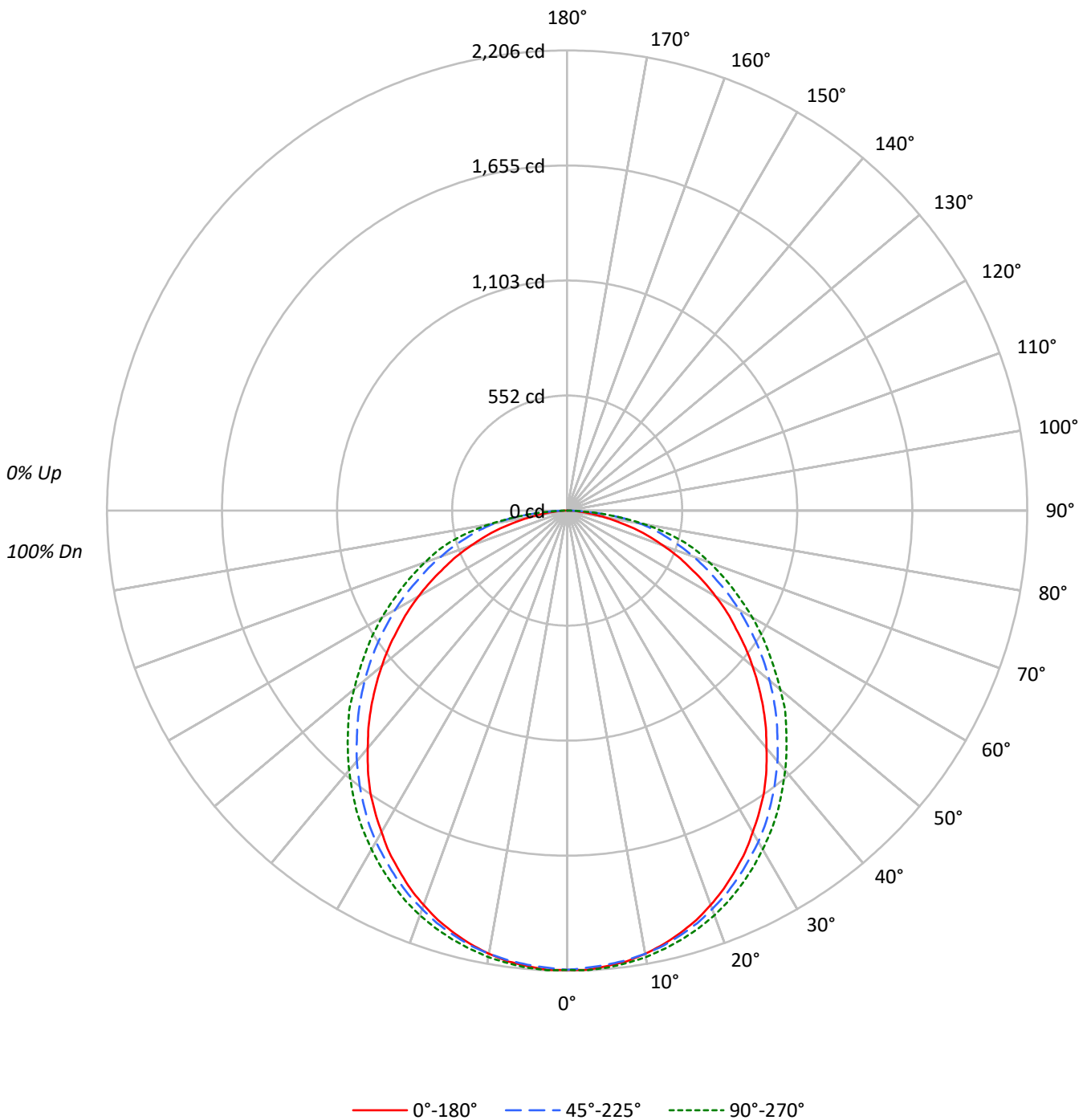
Input Watts (W): 46.221
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2962	2962	2962
5°	2960	2952	2971
10°	2948	2948	2970
15°	2920	2934	2964
20°	2882	2910	2956
25°	2828	2881	2938
30°	2765	2848	2913
35°	2704	2802	2891
40°	2612	2755	2857
45°	2527	2701	2826
50°	2429	2650	2792
55°	2321	2601	2765
60°	2212	2560	2759
65°	2073	2516	2776
70°	1919	2530	2851
75°	1718	2577	3012
80°	1389	2730	2946
85°	1045	2397	2336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.4	3.3
10°-20°	595.6	9.5
20°-30°	895.3	14.3
30°-40°	1066.4	17.0
40°-50°	1091.4	17.4
50°-60°	982.6	15.7
60°-70°	771.7	12.3
70°-80°	500.8	8.0
80°-90°	154.9	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°	1699.3	27.1
0°-40°	2765.7	44.1
0°-60°	4839.8	77.2
0°-90°	6267.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6267.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2202	2202	2202	2202	2202	
5°	2192	2196	2186	2198	2200	208
15°	2096	2102	2106	2124	2128	591
25°	1905	1921	1941	1973	1979	878
35°	1646	1666	1706	1748	1760	1027
45°	1328	1360	1419	1473	1485	1024
55°	989	1033	1109	1166	1178	887
65°	651	701	790	856	872	648
75°	330	394	496	563	579	350
85°	68	125	155	151	151	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2201.7	2201.7	2201.7	2201.7	2201.7
2.5°	2203.7	2203.7	2193.7	2203.7	2205.7
5°	2191.7	2195.7	2185.8	2197.7	2199.7
7.5°	2179.8	2179.8	2173.8	2185.8	2187.8
10°	2157.9	2159.9	2157.9	2171.8	2173.8
12.5°	2130.0	2134.0	2136.0	2149.9	2151.9
15°	2096.2	2102.2	2106.1	2124.0	2128.0
17.5°	2058.4	2064.3	2074.3	2094.2	2098.2
20°	2012.6	2020.5	2032.5	2058.4	2064.3
22.5°	1962.8	1970.8	1990.7	2014.6	2024.5
25°	1905.1	1921.0	1940.9	1972.8	1978.7
27.5°	1847.3	1861.3	1887.2	1921.0	1929.0
30°	1779.7	1801.6	1833.4	1867.3	1875.2
32.5°	1714.0	1735.9	1773.7	1809.5	1819.5
35°	1646.3	1666.2	1706.0	1747.8	1759.8
37.5°	1568.7	1594.5	1638.3	1680.1	1692.1
40°	1487.0	1518.9	1568.7	1612.4	1626.4
42.5°	1409.4	1443.2	1493.0	1540.8	1556.7
45°	1327.8	1359.6	1419.4	1473.1	1485.0
47.5°	1244.2	1280.0	1343.7	1397.5	1417.4
50°	1160.6	1198.4	1266.1	1321.8	1333.8
52.5°	1077.0	1116.8	1188.4	1248.2	1254.1
55°	989.4	1033.2	1108.8	1166.5	1178.5
57.5°	909.7	947.6	1029.2	1088.9	1102.8
60°	822.1	864.0	951.5	1007.3	1025.2
62.5°	738.5	782.3	873.9	929.6	945.6
65°	651.0	700.7	790.3	856.0	871.9
67.5°	575.3	623.1	718.6	782.3	798.3
70°	487.7	541.5	643.0	708.7	724.6
72.5°	412.1	467.8	569.3	633.0	656.9
75°	330.5	394.2	495.7	563.4	579.3
77.5°	250.8	324.5	428.0	479.8	479.8
80°	179.2	256.8	352.3	376.2	380.2
82.5°	117.4	193.1	260.8	258.8	258.8
85°	67.7	125.4	155.3	151.3	151.3
87.5°	25.9	51.8	55.7	55.7	53.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)