

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: P276014

Luminaire Tested: **24CZ2-75HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276014
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: 24CZ2-75HE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6546.2 lumens
Efficiency: N/A
Efficacy: 109.2 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

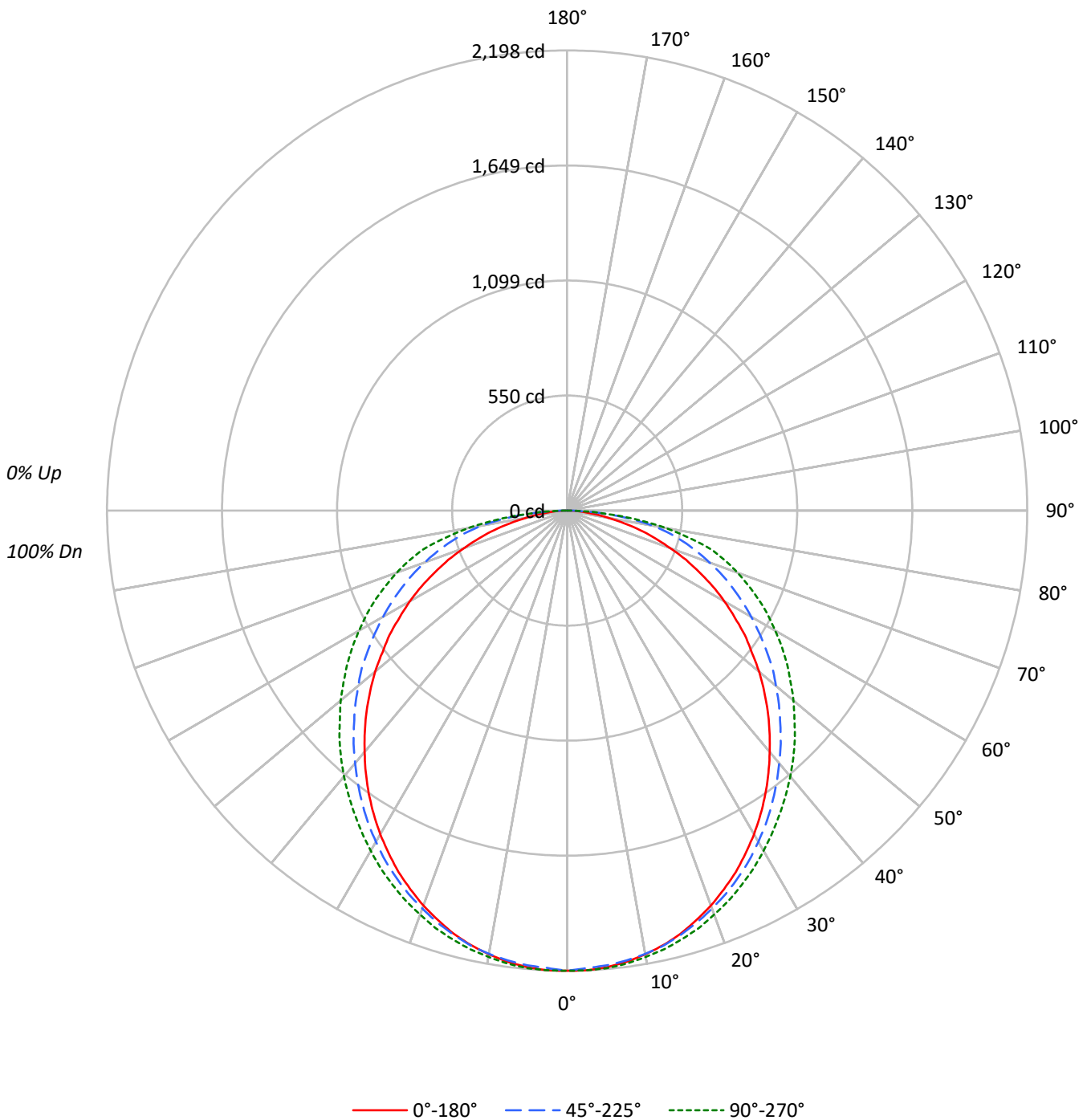
Input Watts (W): 59.922504
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2957	2957	2957
5°	2957	2945	2963
10°	2940	2937	2958
15°	2915	2922	2952
20°	2875	2897	2941
25°	2828	2870	2929
30°	2773	2838	2916
35°	2713	2803	2907
40°	2644	2767	2912
45°	2578	2740	2927
50°	2506	2726	2954
55°	2429	2721	3008
60°	2334	2734	3087
65°	2212	2775	3220
70°	2054	2845	3404
75°	1874	2987	3691
80°	1540	3216	3691
85°	1181	2969	3171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.9	3.2
10°-20°	593.4	9.1
20°-30°	893.0	13.6
30°-40°	1070.2	16.3
40°-50°	1115.3	17.0
50°-60°	1037.6	15.9
60°-70°	854.6	13.1
70°-80°	582.0	8.9
80°-90°	192.2	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°	1694.3	25.9
0°-40°	2764.5	42.2
0°-60°	4917.4	75.1
0°-90°	6546.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6546.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2198	2198	2198	2198	2198	
5°	2189	2189	2180	2191	2194	208
15°	2093	2095	2097	2117	2119	590
25°	1905	1914	1934	1966	1973	877
35°	1652	1671	1706	1752	1770	1032
45°	1355	1383	1440	1512	1538	1045
55°	1036	1070	1160	1252	1282	923
65°	695	754	872	974	1012	690
75°	360	441	575	677	710	380
85°	76	149	192	205	205	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2197.9	2197.9	2197.9	2197.9	2197.9
2.5°	2197.9	2197.9	2186.9	2197.9	2197.9
5°	2189.1	2189.1	2180.4	2191.3	2193.5
7.5°	2173.8	2176.0	2167.3	2180.4	2182.6
10°	2152.0	2154.2	2149.8	2162.9	2165.1
12.5°	2125.8	2128.0	2128.0	2143.2	2145.4
15°	2093.0	2095.2	2097.4	2117.0	2119.2
17.5°	2051.5	2058.0	2062.4	2086.4	2090.8
20°	2007.8	2014.3	2023.1	2049.3	2053.7
22.5°	1957.5	1966.3	1981.6	2010.0	2016.5
25°	1905.1	1913.8	1933.5	1966.3	1972.8
27.5°	1846.1	1859.2	1883.3	1918.2	1927.0
30°	1784.9	1798.1	1826.5	1863.6	1876.7
32.5°	1719.4	1736.9	1769.7	1811.2	1824.3
35°	1651.7	1671.3	1706.3	1752.2	1769.7
37.5°	1579.6	1601.4	1642.9	1693.2	1715.0
40°	1505.3	1531.5	1575.2	1634.2	1658.2
42.5°	1431.0	1455.0	1509.7	1573.0	1599.2
45°	1354.6	1383.0	1439.8	1511.9	1538.1
47.5°	1275.9	1304.3	1372.0	1448.5	1472.5
50°	1197.2	1225.6	1302.1	1383.0	1411.4
52.5°	1112.0	1149.2	1236.6	1317.4	1345.8
55°	1035.6	1070.5	1160.1	1251.9	1282.5
57.5°	948.2	989.7	1088.0	1184.1	1216.9
60°	867.3	911.0	1015.9	1114.2	1147.0
62.5°	784.3	832.4	943.8	1044.3	1081.5
65°	694.8	753.7	871.7	974.4	1011.5
67.5°	613.9	675.1	799.6	904.5	937.3
70°	522.2	596.4	723.2	828.0	865.2
72.5°	443.5	517.8	651.1	753.7	790.9
75°	360.5	441.3	574.6	677.3	710.0
77.5°	277.5	367.0	500.3	579.0	589.9
80°	198.8	292.8	415.1	461.0	476.3
82.5°	139.8	225.0	305.9	336.5	345.2
85°	76.5	148.6	192.3	205.4	205.4
87.5°	32.8	63.4	76.5	78.7	80.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)