

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: P275937

Luminaire Tested: **24CZ2-75HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275937  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6739.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 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

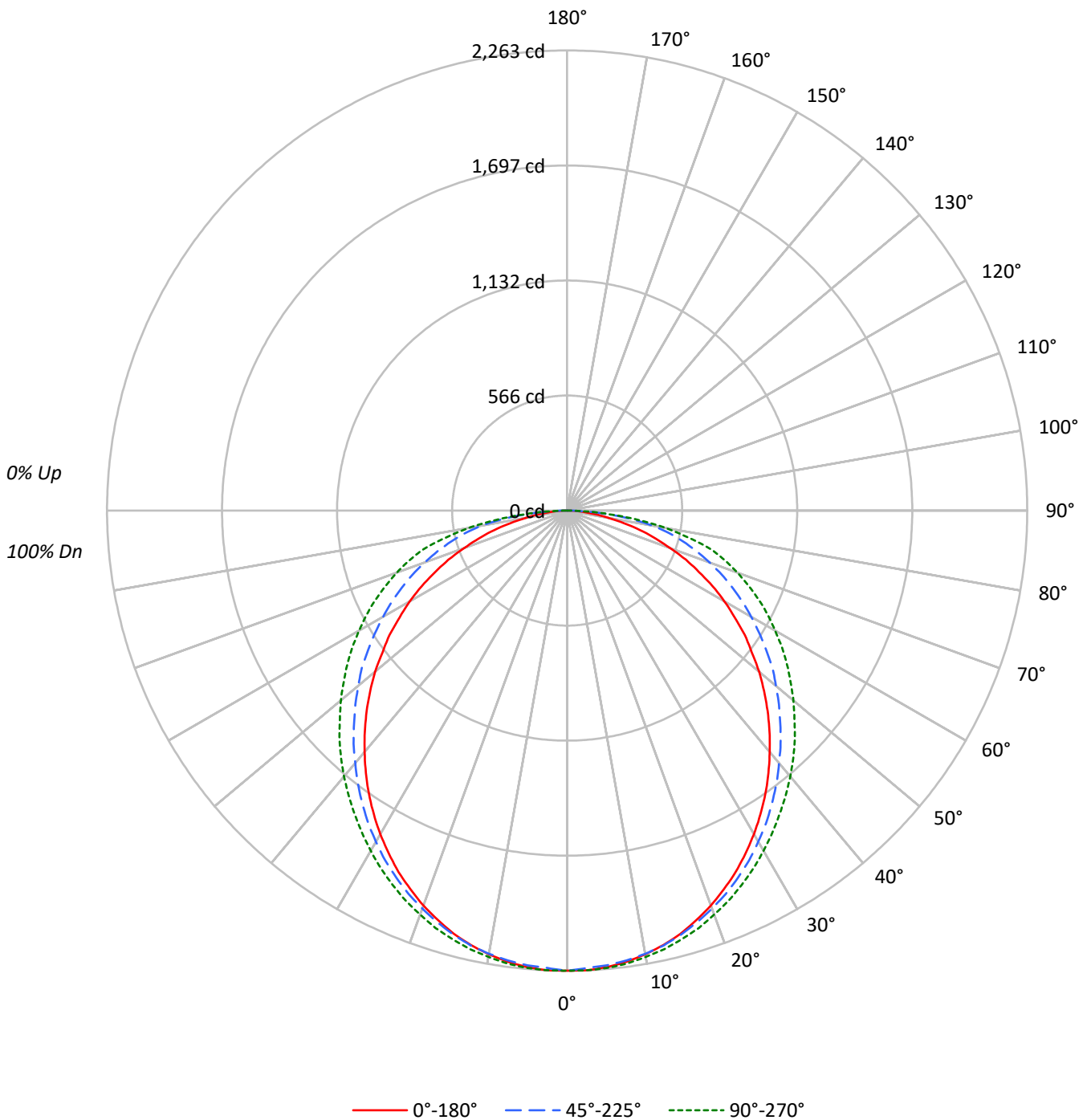
Input Watts (W): 58.311  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3044	3044	3044
5°	3044	3032	3050
10°	3027	3024	3045
15°	3001	3008	3039
20°	2959	2982	3027
25°	2912	2955	3015
30°	2855	2921	3002
35°	2793	2885	2992
40°	2722	2848	2998
45°	2653	2820	3013
50°	2580	2806	3041
55°	2501	2802	3097
60°	2403	2814	3178
65°	2277	2857	3315
70°	2114	2929	3504
75°	1929	3075	3800
80°	1586	3311	3799
85°	1215	3055	3264



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.0	3.2
10°-20°	610.9	9.1
20°-30°	919.3	13.6
30°-40°	1101.7	16.3
40°-50°	1148.1	17.0
50°-60°	1068.2	15.9
60°-70°	879.8	13.1
70°-80°	599.2	8.9
80°-90°	197.8	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°	1744.2	25.9
0°-40°	2846.0	42.2
0°-60°	5062.2	75.1
0°-90°	6739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6739.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2263	2263	2263	2263	2263	
5°	2254	2254	2245	2256	2258	214
15°	2155	2157	2159	2179	2182	607
25°	1961	1970	1990	2024	2031	903
35°	1700	1721	1756	1804	1822	1063
45°	1394	1424	1482	1556	1583	1075
55°	1066	1102	1194	1289	1320	950
65°	715	776	897	1003	1041	710
75°	371	454	592	697	731	391
85°	79	153	198	211	211	98
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2262.6	2262.6	2262.6	2262.6	2262.6
2.5°	2262.6	2262.6	2251.4	2262.6	2262.6
5°	2253.6	2253.6	2244.6	2255.8	2258.1
7.5°	2237.9	2240.1	2231.1	2244.6	2246.9
10°	2215.4	2217.6	2213.1	2226.6	2228.9
12.5°	2188.4	2190.6	2190.6	2206.4	2208.6
15°	2154.6	2156.9	2159.1	2179.4	2181.6
17.5°	2111.9	2118.7	2123.2	2147.9	2152.4
20°	2066.9	2073.7	2082.7	2109.7	2114.2
22.5°	2015.2	2024.2	2039.9	2069.2	2075.9
25°	1961.2	1970.2	1990.5	2024.2	2030.9
27.5°	1900.5	1914.0	1938.7	1974.7	1983.7
30°	1837.5	1851.0	1880.2	1918.5	1932.0
32.5°	1770.0	1788.0	1821.8	1864.5	1878.0
35°	1700.3	1720.6	1756.5	1803.8	1821.8
37.5°	1626.1	1648.6	1691.3	1743.1	1765.5
40°	1549.6	1576.6	1621.6	1682.3	1707.1
42.5°	1473.2	1497.9	1554.1	1619.4	1646.3
45°	1394.4	1423.7	1482.2	1556.4	1583.4
47.5°	1313.5	1342.7	1412.4	1491.2	1515.9
50°	1232.5	1261.7	1340.5	1423.7	1452.9
52.5°	1144.8	1183.0	1273.0	1356.2	1385.4
55°	1066.1	1102.1	1194.3	1288.7	1320.2
57.5°	976.1	1018.8	1120.1	1219.0	1252.7
60°	892.9	937.9	1045.8	1147.0	1180.8
62.5°	807.4	856.9	971.6	1075.1	1113.3
65°	715.2	775.9	897.4	1003.1	1041.3
67.5°	632.0	695.0	823.2	931.1	964.9
70°	537.5	614.0	744.5	852.4	890.6
72.5°	456.6	533.0	670.2	775.9	814.2
75°	371.1	454.3	591.5	697.2	731.0
77.5°	285.6	377.8	515.0	596.0	607.3
80°	204.7	301.4	427.3	474.6	490.3
82.5°	143.9	231.7	314.9	346.4	355.4
85°	78.7	152.9	197.9	211.4	211.4
87.5°	33.7	65.2	78.7	81.0	83.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)