

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: P276123

Luminaire Tested: **24CZ2-75HE-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276123  
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-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6543.5 lumens  
Efficiency: N/A  
Efficacy: 112.0 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

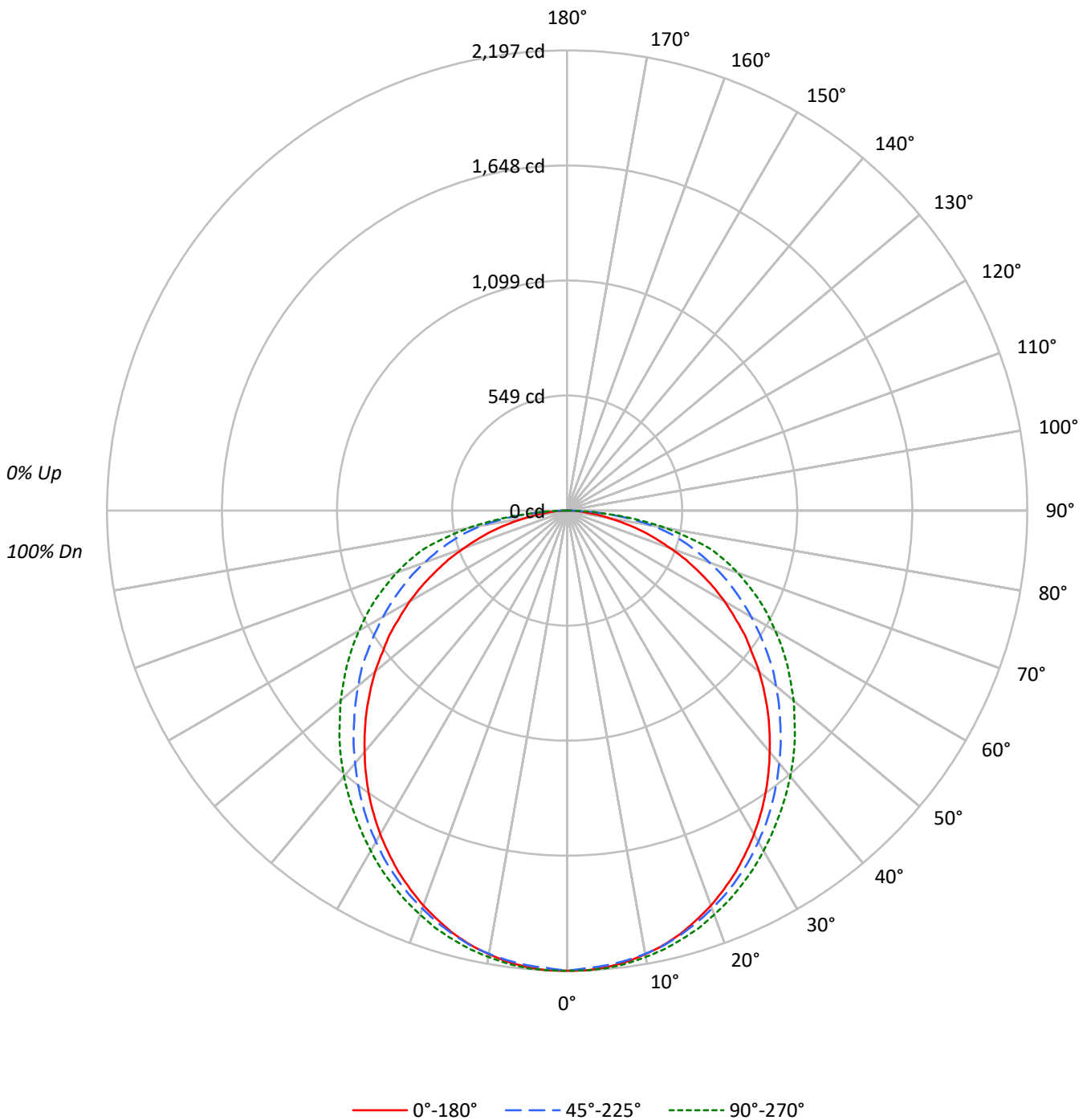
Input Watts (W): 58.404  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2956	2956	2956
5°	2955	2944	2961
10°	2939	2936	2957
15°	2914	2920	2951
20°	2874	2895	2939
25°	2827	2869	2928
30°	2772	2836	2914
35°	2712	2802	2905
40°	2643	2766	2911
45°	2576	2739	2925
50°	2505	2725	2953
55°	2428	2720	3007
60°	2333	2733	3085
65°	2211	2774	3219
70°	2053	2844	3402
75°	1873	2986	3690
80°	1540	3215	3689
85°	1179	2967	3169



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.8	3.2
10°-20°	593.2	9.1
20°-30°	892.7	13.6
30°-40°	1069.8	16.3
40°-50°	1114.8	17.0
50°-60°	1037.2	15.9
60°-70°	854.3	13.1
70°-80°	581.8	8.9
80°-90°	192.1	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°	1693.6	25.9
0°-40°	2763.4	42.2
0°-60°	4915.4	75.1
0°-90°	6543.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6543.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2188	2188	2180	2190	2193	208
15°	2092	2094	2096	2116	2118	589
25°	1904	1913	1933	1966	1972	877
35°	1651	1671	1706	1751	1769	1032
45°	1354	1382	1439	1511	1537	1044
55°	1035	1070	1160	1251	1282	923
65°	694	753	871	974	1011	689
75°	360	441	574	677	710	380
85°	76	148	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°	2197.0	2197.0	2197.0	2197.0	2197.0
2.5°	2197.0	2197.0	2186.0	2197.0	2197.0
5°	2188.2	2188.2	2179.5	2190.4	2192.6
7.5°	2172.9	2175.1	2166.4	2179.5	2181.7
10°	2151.1	2153.3	2148.9	2162.0	2164.2
12.5°	2124.9	2127.1	2127.1	2142.4	2144.5
15°	2092.1	2094.3	2096.5	2116.1	2118.3
17.5°	2050.6	2057.2	2061.6	2085.6	2089.9
20°	2007.0	2013.5	2022.2	2048.4	2052.8
22.5°	1956.7	1965.5	1980.8	2009.1	2015.7
25°	1904.3	1913.1	1932.7	1965.5	1972.0
27.5°	1845.4	1858.5	1882.5	1917.4	1926.2
30°	1784.2	1797.3	1825.7	1862.8	1875.9
32.5°	1718.7	1736.2	1768.9	1810.4	1823.5
35°	1651.0	1670.6	1705.6	1751.4	1768.9
37.5°	1578.9	1600.8	1642.3	1692.5	1714.3
40°	1504.7	1530.9	1574.6	1633.5	1657.5
42.5°	1430.4	1454.4	1509.0	1572.4	1598.6
45°	1354.0	1382.4	1439.2	1511.2	1537.4
47.5°	1275.4	1303.8	1371.5	1447.9	1471.9
50°	1196.7	1225.1	1301.6	1382.4	1410.8
52.5°	1111.6	1148.7	1236.1	1316.9	1345.3
55°	1035.1	1070.1	1159.6	1251.3	1281.9
57.5°	947.8	989.3	1087.6	1183.6	1216.4
60°	867.0	910.7	1015.5	1113.8	1146.5
62.5°	784.0	832.0	943.4	1043.9	1081.0
65°	694.5	753.4	871.4	974.0	1011.1
67.5°	613.7	674.8	799.3	904.1	936.9
70°	521.9	596.2	722.9	827.7	864.8
72.5°	443.3	517.6	650.8	753.4	790.6
75°	360.3	441.1	574.4	677.0	709.8
77.5°	277.3	366.9	500.1	578.7	589.6
80°	198.7	292.6	414.9	460.8	476.1
82.5°	139.8	224.9	305.7	336.3	345.0
85°	76.4	148.5	192.2	205.3	205.3
87.5°	32.8	63.3	76.4	78.6	80.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)