

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: P260998

Luminaire Tested: **24CZ-LD5-55-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260998  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55-S-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5661.0 lumens  
Efficiency: N/A  
Efficacy: 141.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

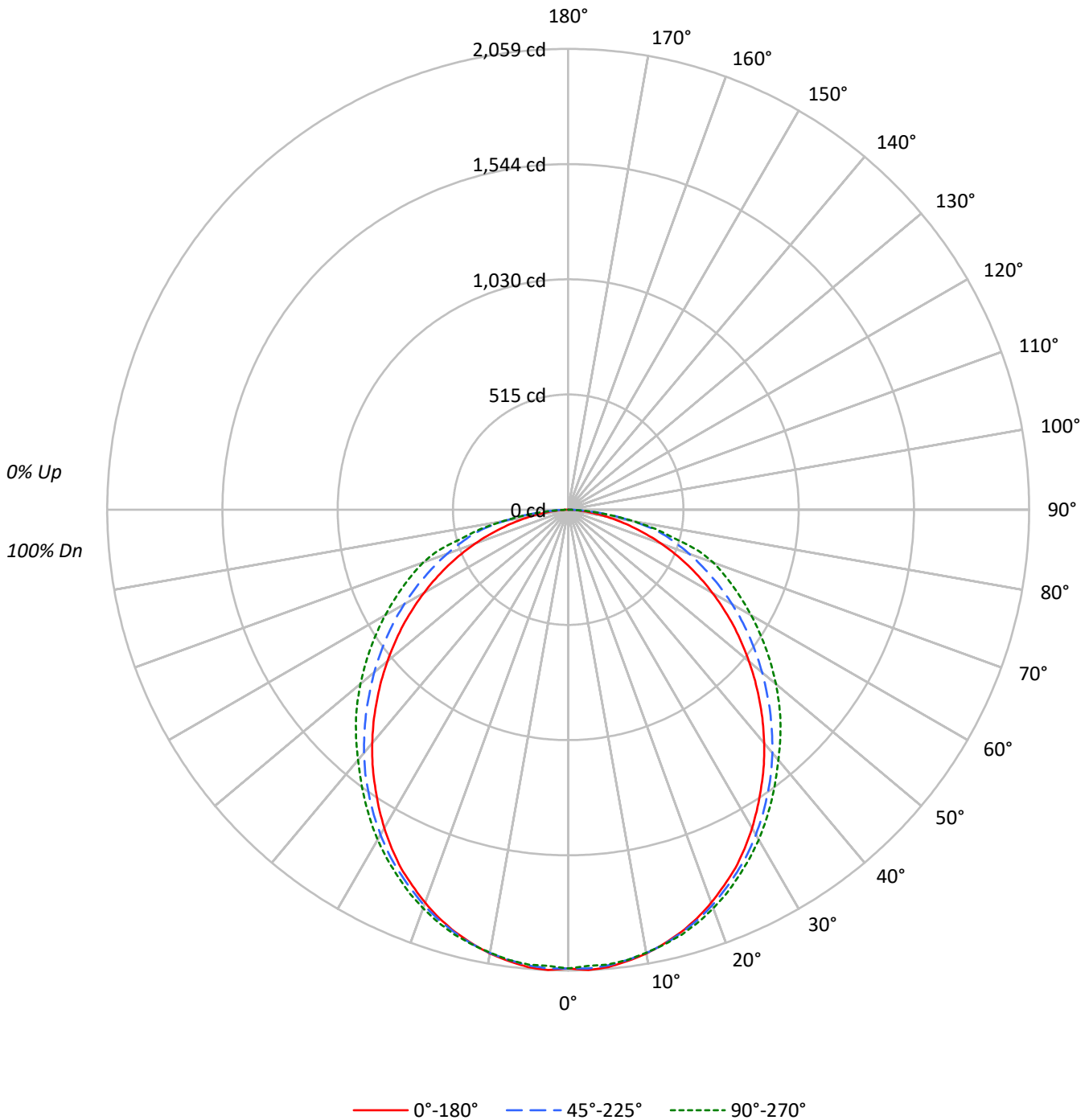
Input Watts (W): 40.083  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2757	2757	2757
5°	2771	2760	2755
10°	2751	2748	2746
15°	2721	2726	2737
20°	2676	2694	2713
25°	2623	2651	2679
30°	2552	2605	2646
35°	2472	2549	2602
40°	2392	2491	2564
45°	2301	2426	2552
50°	2208	2366	2535
55°	2112	2315	2527
60°	2002	2276	2539
65°	1883	2249	2591
70°	1734	2260	2712
75°	1537	2340	2527
80°	1285	2218	2276
85°	960	1774	1629



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.8	3.4
10°-20°	551.1	9.7
20°-30°	821.2	14.5
30°-40°	966.7	17.1
40°-50°	982.4	17.4
50°-60°	883.2	15.6
60°-70°	697.8	12.3
70°-80°	442.7	7.8
80°-90°	122.2	2.2
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°	1566.0	27.7
0°-40°	2532.7	44.7
0°-60°	4398.4	77.7
0°-90°	5661.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5661.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2051	2034	2044	2040	2040	194
15°	1953	1944	1957	1963	1965	550
25°	1767	1765	1786	1797	1804	812
35°	1505	1514	1552	1569	1584	942
45°	1209	1226	1275	1313	1341	933
55°	900	923	987	1051	1077	804
65°	592	622	706	784	814	586
75°	296	347	450	490	486	315
85°	62	107	115	106	106	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2049.4	2049.4	2049.4	2049.4	2049.4
2.5°	2058.8	2043.7	2051.3	2047.5	2040.0
5°	2051.3	2034.3	2043.7	2040.0	2040.0
7.5°	2034.3	2021.1	2028.7	2026.8	2028.7
10°	2013.6	2000.4	2011.7	2011.7	2009.8
12.5°	1985.3	1974.0	1987.2	1987.2	1989.1
15°	1953.3	1943.9	1957.1	1962.7	1964.6
17.5°	1913.8	1904.3	1921.3	1927.0	1932.6
20°	1868.6	1864.8	1881.7	1887.4	1894.9
22.5°	1817.7	1817.7	1834.7	1842.2	1853.5
25°	1766.8	1765.0	1785.7	1797.0	1804.5
27.5°	1706.6	1708.4	1734.8	1746.1	1755.5
30°	1642.5	1646.3	1676.4	1689.6	1702.8
32.5°	1574.7	1582.2	1616.2	1631.2	1644.4
35°	1505.0	1514.4	1552.1	1569.1	1584.1
37.5°	1435.3	1448.5	1488.1	1505.0	1522.0
40°	1361.9	1373.2	1418.4	1439.1	1459.8
42.5°	1286.5	1301.6	1346.8	1376.9	1401.4
45°	1209.3	1226.2	1275.2	1312.9	1341.1
47.5°	1132.1	1154.7	1201.8	1252.6	1277.1
50°	1054.8	1077.4	1130.2	1186.7	1211.2
52.5°	975.7	998.3	1058.6	1117.0	1143.4
55°	900.4	923.0	987.0	1051.1	1077.4
57.5°	821.3	845.7	917.3	983.3	1009.6
60°	744.0	768.5	845.7	915.4	943.7
62.5°	668.7	695.1	776.1	849.5	877.8
65°	591.5	621.6	706.4	783.6	813.7
67.5°	516.1	550.0	638.5	719.5	751.6
70°	440.8	480.3	574.5	657.4	689.4
72.5°	367.3	410.6	510.5	593.3	610.3
75°	295.7	346.6	450.2	489.7	486.0
77.5°	227.9	284.4	382.4	389.9	401.2
80°	165.8	227.9	286.3	301.4	293.8
82.5°	109.3	171.4	205.3	197.8	195.9
85°	62.2	107.4	114.9	105.5	105.5
87.5°	26.4	43.3	37.7	28.3	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)