

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: P260997

Luminaire Tested: **24CZ-LD5-55-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260997  
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-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5350.0 lumens  
Efficiency: N/A  
Efficacy: 133.7 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

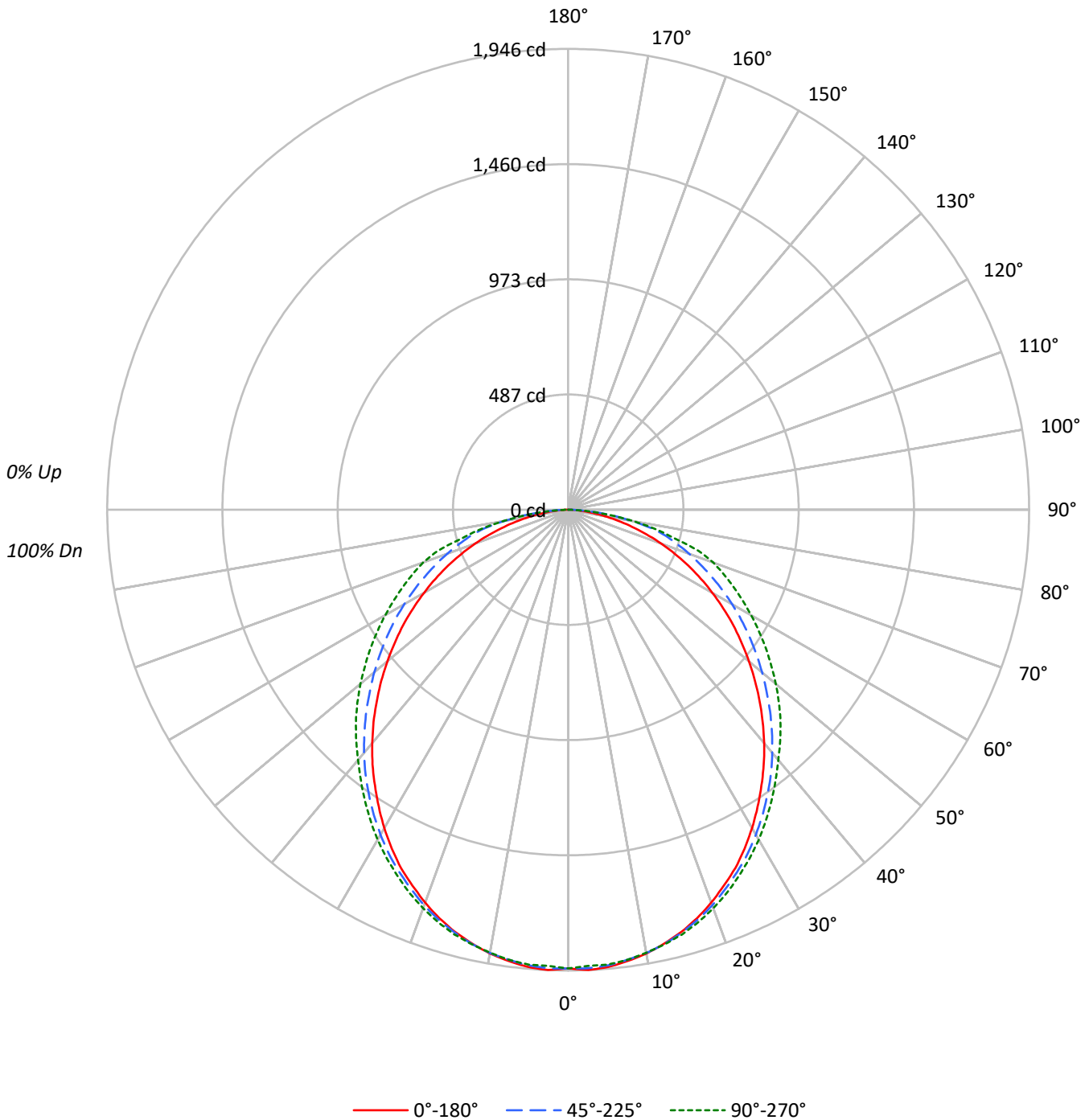
Input Watts (W): 40.002834  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2606	2606	2606
5°	2618	2609	2604
10°	2600	2598	2595
15°	2571	2576	2586
20°	2528	2546	2564
25°	2479	2505	2532
30°	2412	2461	2500
35°	2336	2409	2459
40°	2261	2354	2423
45°	2175	2293	2412
50°	2087	2236	2396
55°	1996	2188	2388
60°	1892	2151	2400
65°	1780	2125	2448
70°	1639	2136	2563
75°	1453	2212	2388
80°	1214	2097	2152
85°	906	1677	1539



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.1	3.4
10°-20°	520.8	9.7
20°-30°	776.1	14.5
30°-40°	913.6	17.1
40°-50°	928.4	17.4
50°-60°	834.7	15.6
60°-70°	659.4	12.3
70°-80°	418.4	7.8
80°-90°	115.5	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°	1480.0	27.7
0°-40°	2393.6	44.7
0°-60°	4156.7	77.7
0°-90°	5350.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5350.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1937	1937	1937	1937	1937	
5°	1939	1923	1932	1928	1928	184
15°	1846	1837	1850	1855	1857	520
25°	1670	1668	1688	1698	1705	768
35°	1422	1431	1467	1483	1497	890
45°	1143	1159	1205	1241	1268	882
55°	851	872	933	993	1018	760
65°	559	587	668	740	769	554
75°	280	328	426	463	459	297
85°	59	102	109	100	100	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1936.8	1936.8	1936.8	1936.8	1936.8
2.5°	1945.7	1931.5	1938.6	1935.0	1927.9
5°	1938.6	1922.6	1931.5	1927.9	1927.9
7.5°	1922.6	1910.1	1917.2	1915.4	1917.2
10°	1903.0	1890.5	1901.2	1901.2	1899.4
12.5°	1876.3	1865.6	1878.1	1878.1	1879.8
15°	1846.0	1837.1	1849.6	1854.9	1856.7
17.5°	1808.6	1799.7	1815.7	1821.1	1826.4
20°	1765.9	1762.3	1778.4	1783.7	1790.8
22.5°	1717.8	1717.8	1733.9	1741.0	1751.7
25°	1669.8	1668.0	1687.6	1698.3	1705.4
27.5°	1612.8	1614.6	1639.5	1650.2	1659.1
30°	1552.3	1555.8	1584.3	1596.8	1609.3
32.5°	1488.2	1495.3	1527.4	1541.6	1554.1
35°	1422.3	1431.2	1466.8	1482.9	1497.1
37.5°	1356.5	1368.9	1406.3	1422.3	1438.4
40°	1287.0	1297.7	1340.4	1360.0	1379.6
42.5°	1215.8	1230.1	1272.8	1301.3	1324.4
45°	1142.9	1158.9	1205.2	1240.8	1267.5
47.5°	1069.9	1091.2	1135.7	1183.8	1206.9
50°	996.9	1018.2	1068.1	1121.5	1144.6
52.5°	922.1	943.5	1000.4	1055.6	1080.5
55°	850.9	872.3	932.8	993.3	1018.2
57.5°	776.1	799.3	866.9	929.2	954.2
60°	703.2	726.3	799.3	865.2	891.9
62.5°	632.0	656.9	733.4	802.8	829.5
65°	559.0	587.4	667.6	740.5	769.0
67.5°	487.8	519.8	603.5	680.0	710.3
70°	416.6	453.9	542.9	621.3	651.5
72.5°	347.1	388.1	482.4	560.7	576.8
75°	279.5	327.5	425.5	462.8	459.3
77.5°	215.4	268.8	361.4	368.5	379.2
80°	156.7	215.4	270.6	284.8	277.7
82.5°	103.2	162.0	194.0	186.9	185.1
85°	58.7	101.5	108.6	99.7	99.7
87.5°	24.9	40.9	35.6	26.7	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)