

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: P261004

Luminaire Tested: **24CZ-LD5-60-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261004
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-LD5-60-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6460.0 lumens
Efficiency: N/A
Efficacy: 142.6 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

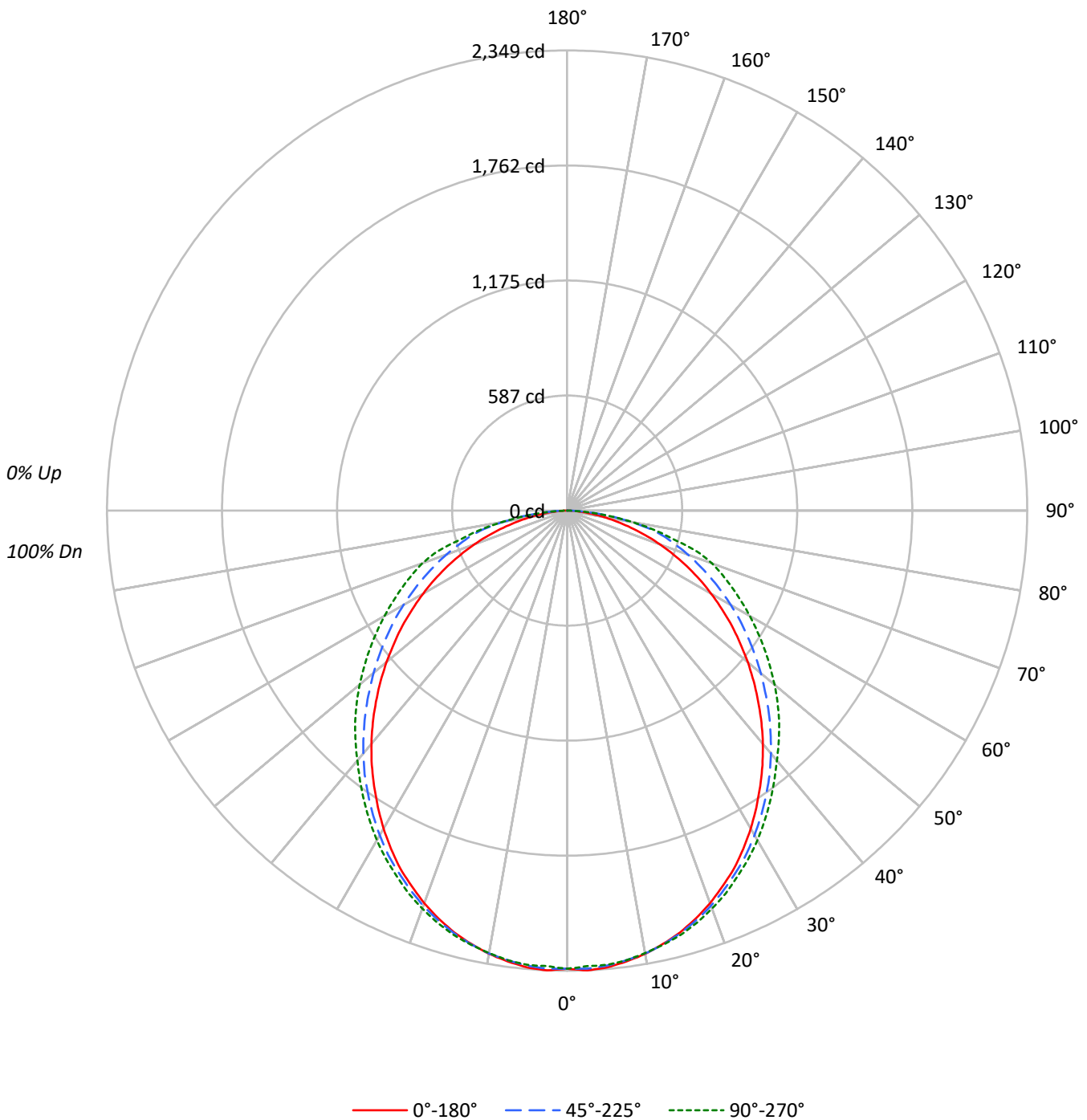
Input Watts (W): 45.286164
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P261004

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L83050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P261004

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L83050-W2A1-U-4000K

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°	3147	3147	3147
5°	3162	3150	3144
10°	3139	3136	3133
15°	3105	3111	3123
20°	3053	3075	3096
25°	2993	3025	3057
30°	2912	2972	3019
35°	2821	2909	2969
40°	2730	2843	2926
45°	2626	2769	2912
50°	2520	2700	2893
55°	2410	2642	2884
60°	2285	2597	2898
65°	2149	2566	2956
70°	1979	2579	3095
75°	1755	2671	2883
80°	1466	2531	2598
85°	1095	2024	1859



TEST NUMBER: P261004

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L83050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.1	3.4
10°-20°	628.8	9.7
20°-30°	937.1	14.5
30°-40°	1103.2	17.1
40°-50°	1121.0	17.4
50°-60°	1007.9	15.6
60°-70°	796.3	12.3
70°-80°	505.1	7.8
80°-90°	139.4	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°	1787.1	27.7
0°-40°	2890.2	44.7
0°-60°	5019.2	77.7
0°-90°	6460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2339	2339	2339	2339	2339	
5°	2341	2321	2332	2328	2328	222
15°	2229	2218	2233	2240	2242	628
25°	2016	2014	2038	2051	2059	927
35°	1717	1728	1771	1790	1808	1074
45°	1380	1399	1455	1498	1530	1065
55°	1028	1053	1126	1199	1230	918
65°	675	709	806	894	929	669
75°	338	396	514	559	555	359
85°	71	122	131	120	120	87
90°	0	0	0	0	0	



TEST NUMBER: P261004

CATALOG NUMBER: 24CZ-LD5-60-S-UNV-L83050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2338.6	2338.6	2338.6	2338.6	2338.6
2.5°	2349.4	2332.2	2340.8	2336.5	2327.9
5°	2340.8	2321.4	2332.2	2327.9	2327.9
7.5°	2321.4	2306.4	2315.0	2312.8	2315.0
10°	2297.8	2282.8	2295.6	2295.6	2293.5
12.5°	2265.6	2252.7	2267.7	2267.7	2269.9
15°	2229.0	2218.3	2233.3	2239.8	2241.9
17.5°	2183.9	2173.1	2192.5	2198.9	2205.4
20°	2132.3	2128.0	2147.3	2153.8	2162.4
22.5°	2074.3	2074.3	2093.6	2102.2	2115.1
25°	2016.2	2014.1	2037.7	2050.6	2059.2
27.5°	1947.4	1949.6	1979.7	1992.6	2003.3
30°	1874.4	1878.6	1913.0	1928.1	1943.1
32.5°	1797.0	1805.6	1844.3	1861.5	1876.5
35°	1717.4	1728.2	1771.2	1790.5	1807.7
37.5°	1637.9	1653.0	1698.1	1717.4	1736.8
40°	1554.1	1567.0	1618.6	1642.2	1665.9
42.5°	1468.1	1485.3	1536.9	1571.3	1599.2
45°	1380.0	1399.3	1455.2	1498.2	1530.4
47.5°	1291.8	1317.6	1371.4	1429.4	1457.4
50°	1203.7	1229.5	1289.7	1354.2	1382.1
52.5°	1113.4	1139.2	1208.0	1274.6	1304.7
55°	1027.5	1053.2	1126.3	1199.4	1229.5
57.5°	937.2	965.1	1046.8	1122.0	1152.1
60°	849.0	877.0	965.1	1044.6	1076.9
62.5°	763.1	793.2	885.6	969.4	1001.7
65°	674.9	709.3	806.1	894.2	928.6
67.5°	589.0	627.6	728.7	821.1	857.6
70°	503.0	548.1	655.6	750.2	786.7
72.5°	419.1	468.6	582.5	677.1	696.4
75°	337.5	395.5	513.7	558.9	554.6
77.5°	260.1	324.6	436.3	444.9	457.8
80°	189.2	260.1	326.7	343.9	335.3
82.5°	124.7	195.6	234.3	225.7	223.5
85°	70.9	122.5	131.1	120.4	120.4
87.5°	30.1	49.4	43.0	32.2	30.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)