

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: P230066

Luminaire Tested: **24CZ-LD5-75-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230066
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-LD5-75-S-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6741.0 lumens
Efficiency: N/A
Efficacy: 97.6 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

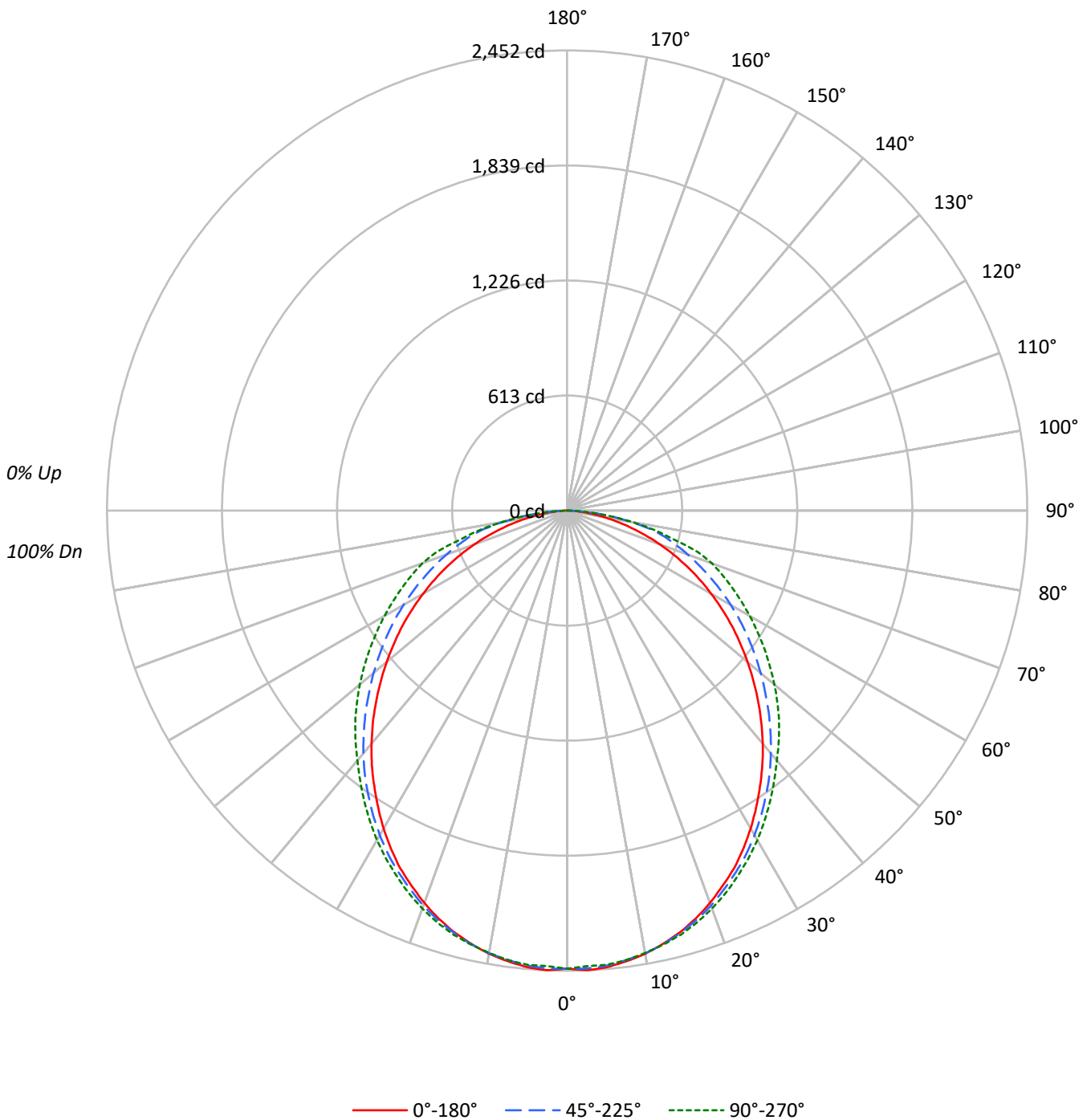
Input Watts (W): 69.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230066

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230066

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L940-CD1-U

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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3284	3284	3284
5°	3299	3287	3281
10°	3276	3273	3270
15°	3240	3246	3259
20°	3186	3208	3231
25°	3123	3157	3190
30°	3039	3102	3150
35°	2944	3036	3098
40°	2848	2967	3053
45°	2740	2889	3039
50°	2629	2817	3019
55°	2515	2757	3010
60°	2384	2710	3024
65°	2242	2678	3085
70°	2065	2691	3229
75°	1830	2787	3008
80°	1530	2641	2711
85°	1142	2112	1939



TEST NUMBER: P230066

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.7	3.4
10°-20°	656.2	9.7
20°-30°	977.9	14.5
30°-40°	1151.1	17.1
40°-50°	1169.8	17.4
50°-60°	1051.7	15.6
60°-70°	830.9	12.3
70°-80°	527.1	7.8
80°-90°	145.5	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°	1864.8	27.7
0°-40°	3016.0	44.7
0°-60°	5237.5	77.7
0°-90°	6741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6741.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2440	2440	2440	2440	2440	
5°	2443	2422	2434	2429	2429	232
15°	2326	2315	2330	2337	2339	655
25°	2104	2102	2126	2140	2149	967
35°	1792	1803	1848	1868	1886	1121
45°	1440	1460	1518	1563	1597	1111
55°	1072	1099	1175	1252	1283	957
65°	704	740	841	933	969	698
75°	352	413	536	583	579	375
85°	74	128	137	126	126	91
90°	0	0	0	0	0	



TEST NUMBER: P230066

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2440.4	2440.4	2440.4	2440.4	2440.4
2.5°	2451.6	2433.6	2442.6	2438.1	2429.2
5°	2442.6	2422.4	2433.6	2429.2	2429.2
7.5°	2422.4	2406.7	2415.7	2413.5	2415.7
10°	2397.7	2382.0	2395.5	2395.5	2393.3
12.5°	2364.1	2350.6	2366.3	2366.3	2368.6
15°	2326.0	2314.8	2330.5	2337.2	2339.4
17.5°	2278.9	2267.7	2287.8	2294.6	2301.3
20°	2225.0	2220.6	2240.7	2247.5	2256.4
22.5°	2164.5	2164.5	2184.7	2193.6	2207.1
25°	2103.9	2101.7	2126.3	2139.8	2148.8
27.5°	2032.1	2034.4	2065.8	2079.2	2090.5
30°	1955.9	1960.4	1996.3	2012.0	2027.7
32.5°	1875.1	1884.1	1924.5	1942.4	1958.1
35°	1792.1	1803.4	1848.2	1868.4	1886.3
37.5°	1709.2	1724.9	1772.0	1792.1	1812.3
40°	1621.7	1635.1	1689.0	1713.6	1738.3
42.5°	1532.0	1549.9	1603.7	1639.6	1668.8
45°	1440.0	1460.2	1518.5	1563.4	1597.0
47.5°	1348.0	1374.9	1431.0	1491.6	1520.7
50°	1256.1	1283.0	1345.8	1413.1	1442.2
52.5°	1161.9	1188.8	1260.6	1330.1	1361.5
55°	1072.1	1099.1	1175.3	1251.6	1283.0
57.5°	977.9	1007.1	1092.3	1170.8	1202.2
60°	886.0	915.1	1007.1	1090.1	1123.7
62.5°	796.3	827.7	924.1	1011.6	1045.2
65°	704.3	740.2	841.1	933.1	969.0
67.5°	614.6	655.0	760.4	856.8	895.0
70°	524.9	572.0	684.1	782.8	820.9
72.5°	437.4	489.0	607.8	706.5	726.7
75°	352.1	412.7	536.1	583.2	578.7
77.5°	271.4	338.7	455.3	464.3	477.8
80°	197.4	271.4	340.9	358.9	349.9
82.5°	130.1	204.1	244.5	235.5	233.3
85°	74.0	127.9	136.8	125.6	125.6
87.5°	31.4	51.6	44.9	33.6	31.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)