

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: P229987

Luminaire Tested: **24CZ-LD5-65-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229987
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6315.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

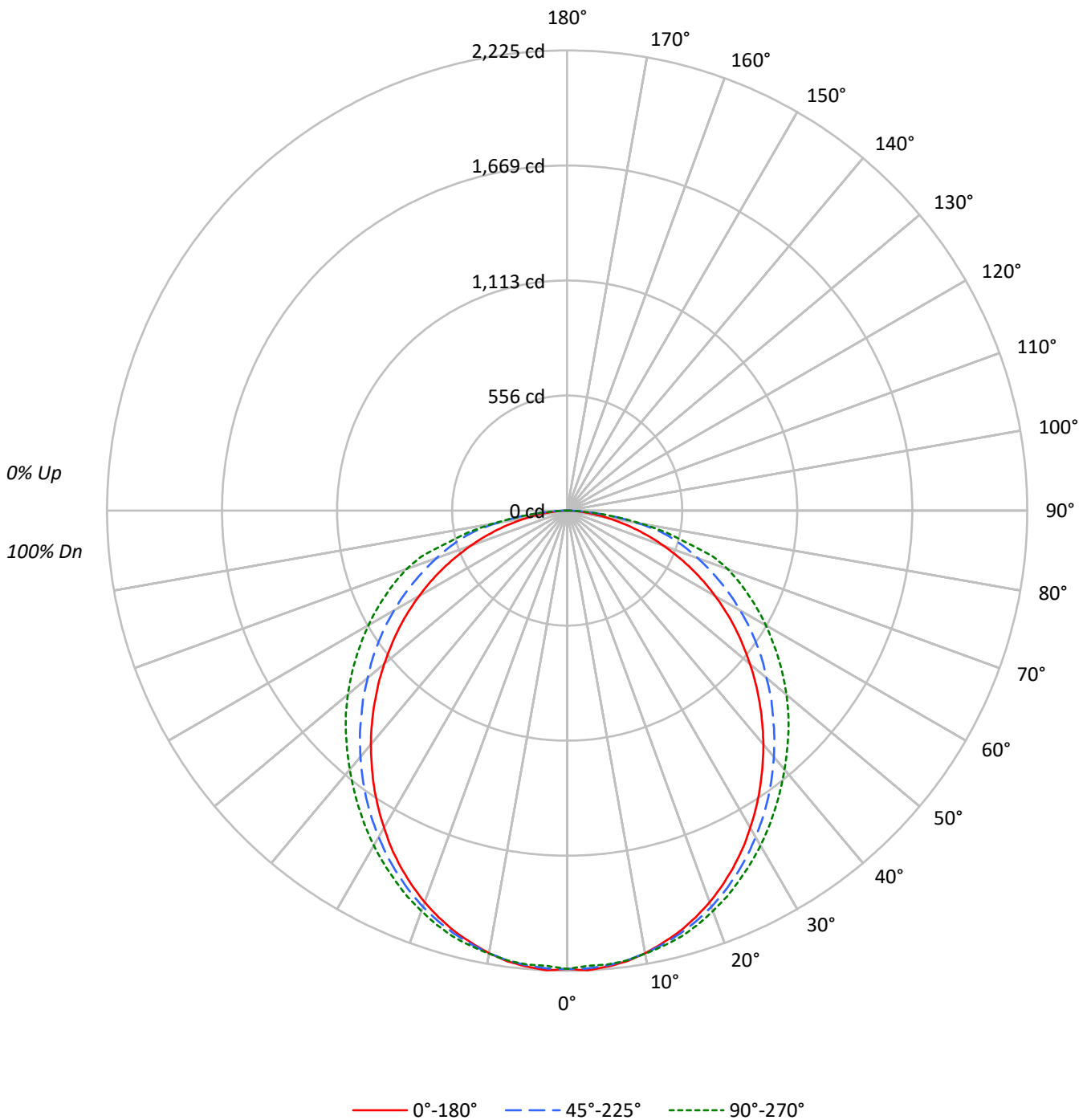
Input Watts (W): 57.64
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229987

CATALOG NUMBER: 24CZ-LD5-65-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229987

CATALOG NUMBER: 24CZ-LD5-65-UNV-L950-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2982	2982	2982
5°	2990	2982	2976
10°	2969	2969	2972
15°	2934	2949	2970
20°	2885	2919	2950
25°	2825	2879	2927
30°	2751	2832	2906
35°	2674	2784	2884
40°	2594	2731	2871
45°	2506	2678	2880
50°	2417	2634	2897
55°	2328	2617	2927
60°	2223	2601	2985
65°	2106	2602	3084
70°	1948	2645	3249
75°	1742	2765	3091
80°	1457	2647	2831
85°	1102	2036	1936



TEST NUMBER: P229987

CATALOG NUMBER: 24CZ-LD5-65-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.4	3.3
10°-20°	596.1	9.4
20°-30°	891.1	14.1
30°-40°	1057.1	16.7
40°-50°	1088.0	17.2
50°-60°	998.1	15.8
60°-70°	807.0	12.8
70°-80°	523.8	8.3
80°-90°	144.4	2.3
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°	1696.6	26.9
0°-40°	2753.6	43.6
0°-60°	4839.8	76.6
0°-90°	6315.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6315.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2216	2216	2216	2216	2216	
5°	2214	2199	2208	2205	2203	210
15°	2106	2097	2117	2125	2132	593
25°	1903	1905	1940	1957	1972	876
35°	1628	1641	1695	1732	1756	1018
45°	1317	1338	1408	1475	1514	1016
55°	992	1023	1116	1206	1248	887
65°	662	700	817	925	969	654
75°	335	398	532	595	595	356
85°	71	121	132	128	125	87
90°	0	0	0	0	0	



TEST NUMBER: P229987

CATALOG NUMBER: 24CZ-LD5-65-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2216.2	2216.2	2216.2	2216.2	2216.2
2.5°	2224.9	2207.6	2216.2	2214.1	2203.3
5°	2214.1	2198.9	2207.6	2205.4	2203.3
7.5°	2198.9	2183.8	2194.6	2192.5	2194.6
10°	2173.0	2160.0	2173.0	2175.2	2175.2
12.5°	2140.6	2129.7	2147.0	2151.4	2155.7
15°	2106.0	2097.3	2116.8	2125.4	2131.9
17.5°	2062.7	2056.2	2080.0	2090.8	2099.5
20°	2015.2	2013.0	2038.9	2049.7	2060.6
22.5°	1961.1	1961.1	1991.4	2004.3	2019.5
25°	1902.7	1904.9	1939.5	1956.8	1971.9
27.5°	1840.0	1842.2	1883.3	1904.9	1922.2
30°	1770.8	1779.5	1822.7	1850.8	1870.3
32.5°	1701.6	1712.4	1760.0	1792.4	1814.1
35°	1628.1	1641.1	1695.2	1731.9	1755.7
37.5°	1552.4	1567.6	1626.0	1667.0	1695.2
40°	1476.8	1494.1	1554.6	1602.2	1634.6
42.5°	1396.8	1416.2	1483.3	1539.5	1574.1
45°	1316.8	1338.4	1407.6	1474.6	1513.5
47.5°	1236.8	1262.7	1336.2	1409.7	1450.8
50°	1154.6	1180.6	1258.4	1342.7	1383.8
52.5°	1072.4	1102.7	1189.2	1275.7	1316.8
55°	992.4	1022.7	1115.7	1206.5	1247.6
57.5°	910.3	940.5	1042.2	1137.3	1178.4
60°	826.0	860.5	966.5	1063.8	1109.2
62.5°	743.8	780.5	893.0	996.8	1040.0
65°	661.6	700.5	817.3	925.4	968.7
67.5°	577.3	622.7	743.8	854.1	899.5
70°	495.1	544.9	672.4	782.7	826.0
72.5°	415.1	469.2	601.1	713.5	739.5
75°	335.1	397.8	531.9	594.6	594.6
77.5°	259.5	328.7	454.1	477.8	490.8
80°	188.1	263.8	341.6	369.7	365.4
82.5°	125.4	201.1	244.3	244.3	237.8
85°	71.4	121.1	131.9	127.6	125.4
87.5°	30.3	45.4	41.1	32.4	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)