

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: P230099

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230099
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-LD5-65SE-S-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6400.0 lumens
Efficiency: N/A
Efficacy: 106.7 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

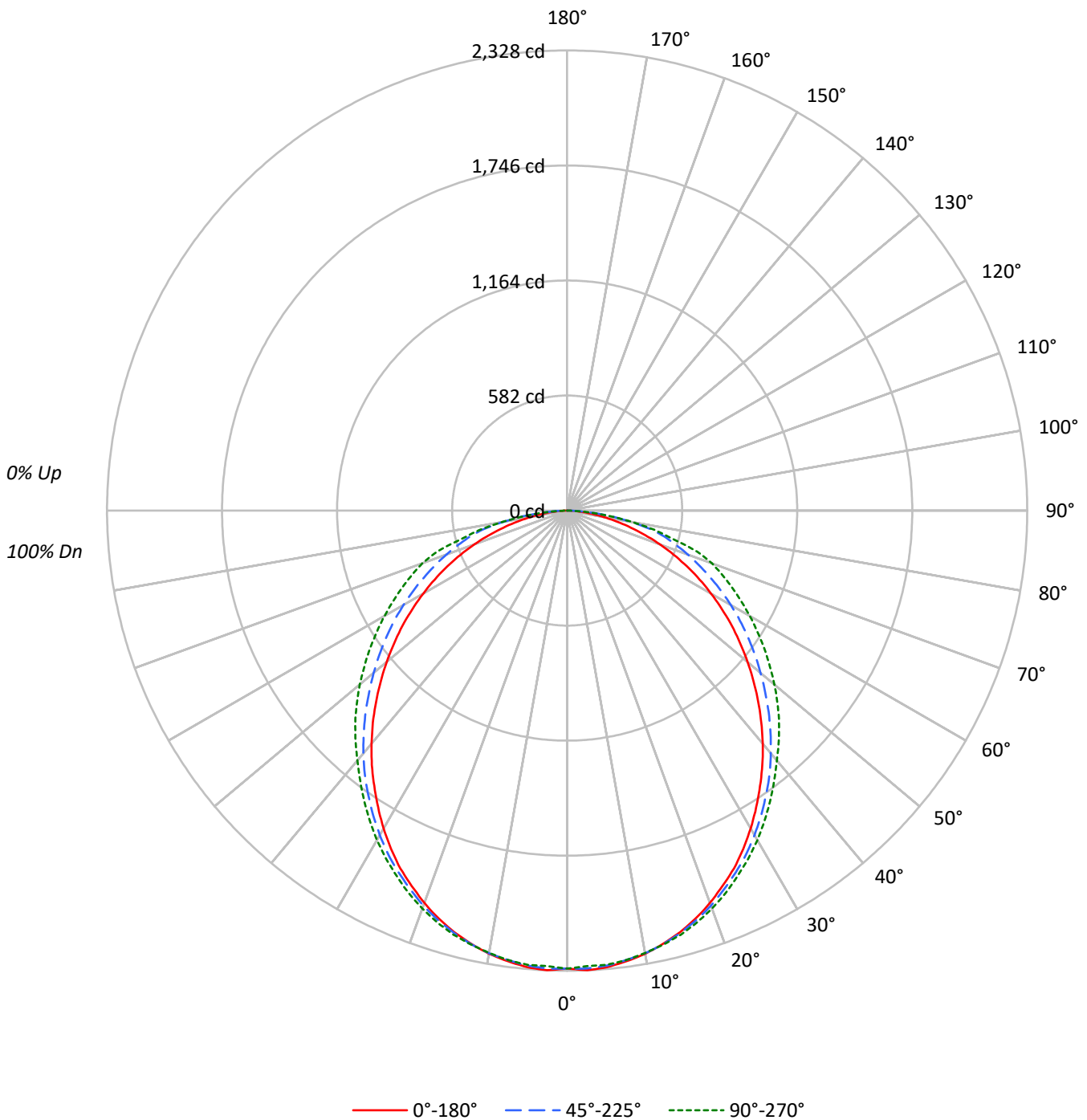
Input Watts (W): 60
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3117	3117	3117
5°	3132	3121	3115
10°	3110	3107	3104
15°	3076	3082	3094
20°	3025	3046	3067
25°	2965	2997	3029
30°	2885	2945	2991
35°	2795	2882	2942
40°	2704	2816	2899
45°	2602	2743	2885
50°	2496	2674	2866
55°	2388	2618	2857
60°	2264	2573	2871
65°	2129	2543	2929
70°	1960	2555	3066
75°	1738	2646	2856
80°	1452	2508	2574
85°	1085	2005	1842



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.1	3.4
10°-20°	623.0	9.7
20°-30°	928.4	14.5
30°-40°	1092.9	17.1
40°-50°	1110.6	17.4
50°-60°	998.5	15.6
60°-70°	788.9	12.3
70°-80°	500.5	7.8
80°-90°	138.1	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°	1770.5	27.7
0°-40°	2863.4	44.7
0°-60°	4972.6	77.7
0°-90°	6400.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6400.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2317	2317	2317	2317	2317	
5°	2319	2300	2310	2306	2306	220
15°	2208	2198	2213	2219	2221	622
25°	1998	1995	2019	2032	2040	918
35°	1702	1712	1755	1774	1791	1064
45°	1367	1386	1442	1484	1516	1055
55°	1018	1044	1116	1188	1218	909
65°	669	703	799	886	920	662
75°	334	392	509	554	549	356
85°	70	121	130	119	119	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2316.9	2316.9	2316.9	2316.9	2316.9
2.5°	2327.6	2310.5	2319.0	2314.8	2306.3
5°	2319.0	2299.9	2310.5	2306.3	2306.3
7.5°	2299.9	2285.0	2293.5	2291.4	2293.5
10°	2276.5	2261.6	2274.3	2274.3	2272.2
12.5°	2244.5	2231.7	2246.6	2246.6	2248.8
15°	2208.3	2197.7	2212.6	2219.0	2221.1
17.5°	2163.6	2152.9	2172.1	2178.5	2184.9
20°	2112.5	2108.2	2127.4	2133.8	2142.3
22.5°	2055.0	2055.0	2074.2	2082.7	2095.4
25°	1997.5	1995.4	2018.8	2031.6	2040.1
27.5°	1929.3	1931.5	1961.3	1974.1	1984.7
30°	1856.9	1861.2	1895.3	1910.2	1925.1
32.5°	1780.3	1788.8	1827.1	1844.2	1859.1
35°	1701.5	1712.1	1754.7	1773.9	1790.9
37.5°	1622.7	1637.6	1682.3	1701.5	1720.7
40°	1539.6	1552.4	1603.5	1627.0	1650.4
42.5°	1454.5	1471.5	1522.6	1556.7	1584.4
45°	1367.2	1386.3	1441.7	1484.3	1516.2
47.5°	1279.8	1305.4	1358.6	1416.1	1443.8
50°	1192.5	1218.1	1277.7	1341.6	1369.3
52.5°	1103.1	1128.6	1196.8	1262.8	1292.6
55°	1017.9	1043.5	1115.9	1188.3	1218.1
57.5°	928.5	956.2	1037.1	1111.6	1141.4
60°	841.2	868.8	956.2	1034.9	1066.9
62.5°	756.0	785.8	877.4	960.4	992.4
65°	668.7	702.7	798.6	885.9	920.0
67.5°	583.5	621.8	721.9	813.5	849.7
70°	498.3	543.0	649.5	743.2	779.4
72.5°	415.3	464.2	577.1	670.8	690.0
75°	334.3	391.8	509.0	553.7	549.4
77.5°	257.7	321.6	432.3	440.8	453.6
80°	187.4	257.7	323.7	340.7	332.2
82.5°	123.5	193.8	232.1	223.6	221.5
85°	70.3	121.4	129.9	119.3	119.3
87.5°	29.8	49.0	42.6	31.9	29.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)