

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: P#

Luminaire Tested: **24CZ-LD5-60SE-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
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-LD5-60SE-S-UNV-L840-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

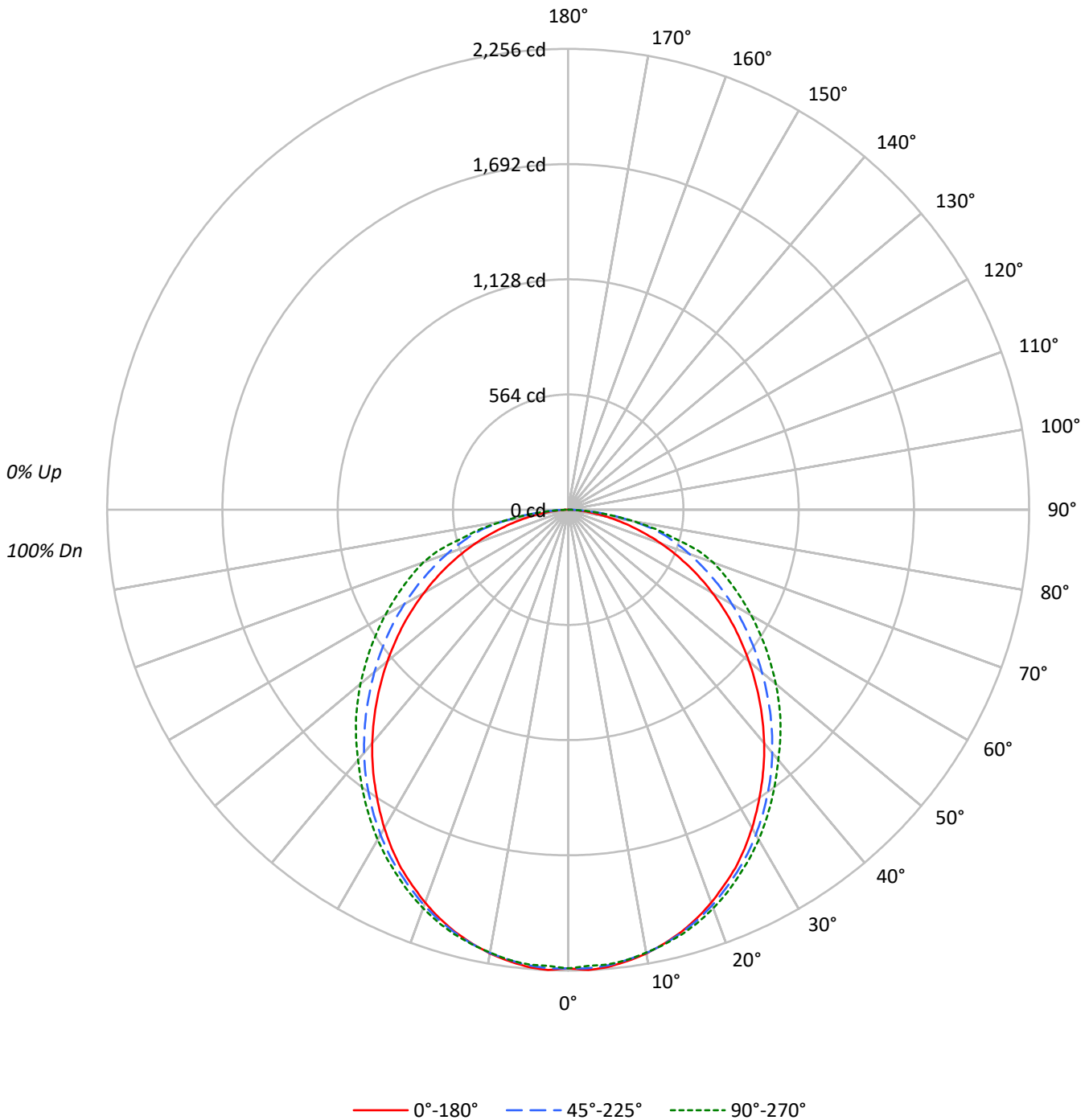
Lumens per Lamp: N/A
Luminaire Lumens: 6201.9 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 60
Input Voltage (V): NR
Input Current (A_{in}): 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°	3021	3021	3021
5°	3029	3010	3005
10°	3001	2983	2982
15°	2961	2945	2958
20°	2905	2896	2919
25°	2840	2834	2868
30°	2756	2769	2817
35°	2662	2693	2754
40°	2567	2613	2696
45°	2459	2524	2663
50°	2349	2438	2621
55°	2234	2358	2584
60°	2102	2283	2560
65°	1958	2212	2563
70°	1778	2161	2612
75°	1541	2140	2332
80°	1232	1869	1943
85°	818	1210	1136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.3	3.4
10°-20°	603.7	9.7
20°-30°	899.7	14.5
30°-40°	1059.1	17.1
40°-50°	1076.2	17.4
50°-60°	967.6	15.6
60°-70°	764.4	12.3
70°-80°	485.0	7.8
80°-90°	133.9	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°	1715.7	27.7
0°-40°	2774.7	44.7
0°-60°	4818.6	77.7
0°-90°	6201.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6201.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2245	2245	2245	2245	2245	
5°	2247	2229	2239	2235	2235	213
15°	2140	2130	2144	2150	2152	603
25°	1936	1934	1956	1969	1977	890
35°	1649	1659	1700	1719	1736	1032
45°	1325	1343	1397	1438	1469	1022
55°	986	1011	1081	1152	1180	881
65°	648	681	774	858	892	642
75°	324	380	493	536	532	345
85°	68	118	126	116	116	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2245.2	2245.2	2245.2	2245.2	2245.2
2.5°	2255.5	2239.0	2247.2	2243.1	2234.9
5°	2247.2	2228.7	2239.0	2234.9	2234.9
7.5°	2228.7	2214.2	2222.5	2220.4	2222.5
10°	2206.0	2191.5	2203.9	2203.9	2201.8
12.5°	2175.0	2162.6	2177.1	2177.1	2179.1
15°	2139.9	2129.6	2144.1	2150.2	2152.3
17.5°	2096.6	2086.3	2104.9	2111.0	2117.2
20°	2047.1	2042.9	2061.5	2067.7	2076.0
22.5°	1991.4	1991.4	2009.9	2018.2	2030.6
25°	1935.6	1933.6	1956.3	1968.7	1976.9
27.5°	1869.6	1871.7	1900.6	1912.9	1923.3
30°	1799.4	1803.6	1836.6	1851.0	1865.5
32.5°	1725.2	1733.4	1770.6	1787.1	1801.5
35°	1648.8	1659.1	1700.4	1719.0	1735.5
37.5°	1572.4	1586.9	1630.2	1648.8	1667.4
40°	1492.0	1504.3	1553.9	1576.6	1599.3
42.5°	1409.4	1425.9	1475.5	1508.5	1535.3
45°	1324.8	1343.4	1397.0	1438.3	1469.3
47.5°	1240.2	1265.0	1316.6	1372.3	1399.1
50°	1155.6	1180.4	1238.1	1300.1	1326.9
52.5°	1068.9	1093.7	1159.7	1223.7	1252.6
55°	986.4	1011.2	1081.3	1151.5	1180.4
57.5°	899.7	926.5	1005.0	1077.2	1106.1
60°	815.1	841.9	926.5	1002.9	1033.9
62.5°	732.6	761.5	850.2	930.7	961.6
65°	648.0	681.0	773.8	858.4	891.5
67.5°	565.4	602.6	699.6	788.3	823.4
70°	482.9	526.2	629.4	720.2	755.3
72.5°	402.4	449.9	559.2	650.0	668.6
75°	324.0	379.7	493.2	536.5	532.4
77.5°	249.7	311.6	418.9	427.2	439.5
80°	181.6	249.7	313.7	330.2	321.9
82.5°	119.7	187.8	224.9	216.7	214.6
85°	68.1	117.6	125.9	115.6	115.6
87.5°	28.9	47.5	41.3	31.0	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)