

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-LD5-60-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 (P25689)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-60-UNV-L840-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

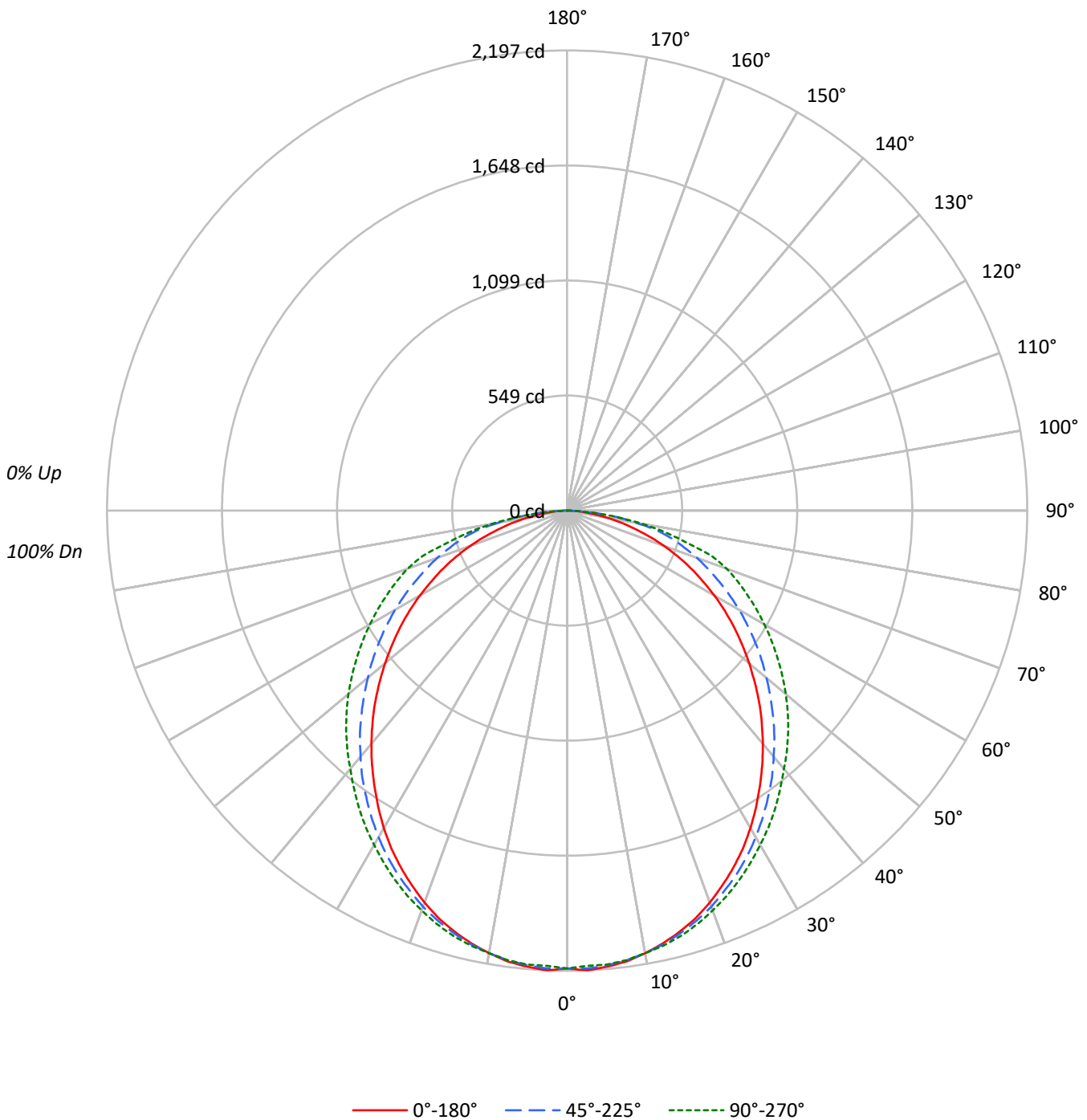
Lumens per Lamp: N/A
Luminaire Lumens: 6221.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 52.17
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	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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	79	70	63	87	77	69	63	74	67	62	71	65	61	69	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	33					33			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2941	2941	2941
5°	2946	2931	2925
10°	2919	2905	2906
15°	2878	2869	2889
20°	2826	2827	2857
25°	2758	2775	2822
30°	2680	2715	2783
35°	2589	2648	2751
40°	2501	2580	2715
45°	2408	2512	2704
50°	2306	2446	2692
55°	2205	2390	2683
60°	2096	2337	2694
65°	1970	2287	2726
70°	1807	2260	2803
75°	1580	2250	2577
80°	1293	1979	2185
85°	890	1281	1248



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	3.3
10°-20°	588.4	9.5
20°-30°	879.6	14.1
30°-40°	1043.0	16.8
40°-50°	1072.6	17.2
50°-60°	981.1	15.8
60°-70°	791.3	12.7
70°-80°	513.7	8.3
80°-90°	144.6	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°	1674.7	26.9
0°-40°	2717.7	43.7
0°-60°	4771.4	76.7
0°-90°	6221.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2186	2186	2186	2186	2186	
5°	2186	2171	2180	2176	2176	207
15°	2080	2070	2089	2097	2102	586
25°	1879	1879	1915	1930	1945	865
35°	1604	1619	1672	1706	1733	1004
45°	1297	1321	1390	1454	1492	1000
55°	974	1005	1096	1183	1225	871
65°	652	690	800	904	948	644
75°	332	394	518	582	588	354
85°	74	123	133	131	127	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2186.1	2186.1	2186.1	2186.1	2186.1
2.5°	2196.7	2179.8	2188.2	2184.0	2175.5
5°	2186.1	2171.3	2179.8	2175.5	2175.5
7.5°	2171.3	2156.5	2164.9	2164.9	2164.9
10°	2145.9	2133.2	2145.9	2145.9	2145.9
12.5°	2116.3	2105.7	2120.5	2122.6	2126.9
15°	2080.3	2069.7	2088.8	2097.2	2101.5
17.5°	2040.1	2031.6	2052.8	2063.4	2069.7
20°	1991.4	1985.1	2012.6	2023.2	2031.6
22.5°	1936.4	1936.4	1963.9	1976.6	1991.4
25°	1879.3	1879.3	1915.2	1930.0	1944.9
27.5°	1817.9	1820.0	1860.2	1881.4	1896.2
30°	1750.2	1758.6	1801.0	1826.3	1843.3
32.5°	1678.2	1688.8	1737.5	1769.2	1790.4
35°	1604.1	1619.0	1671.9	1705.7	1733.2
37.5°	1530.1	1549.1	1606.3	1644.3	1671.9
40°	1453.9	1475.0	1534.3	1578.7	1610.5
42.5°	1375.6	1398.9	1464.5	1515.3	1553.3
45°	1297.3	1320.6	1390.4	1453.9	1492.0
47.5°	1214.7	1242.3	1316.3	1390.4	1428.5
50°	1134.3	1164.0	1242.3	1322.7	1362.9
52.5°	1053.9	1087.8	1170.3	1255.0	1295.2
55°	973.5	1005.2	1096.2	1183.0	1225.3
57.5°	893.1	926.9	1022.2	1113.2	1157.6
60°	812.6	848.6	948.1	1043.3	1087.8
62.5°	730.1	768.2	874.0	973.5	1017.9
65°	651.8	689.9	800.0	903.6	948.1
67.5°	571.4	613.7	728.0	833.8	880.4
70°	491.0	537.5	658.2	764.0	810.5
72.5°	410.6	463.5	586.2	692.0	725.9
75°	332.3	393.6	518.5	582.0	588.3
77.5°	260.3	323.8	442.3	467.7	480.4
80°	190.5	260.3	332.3	364.0	361.9
82.5°	127.0	198.9	239.1	243.4	239.1
85°	74.1	122.7	133.3	131.2	127.0
87.5°	31.7	48.7	42.3	36.0	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)