

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: P389429

Luminaire Tested: **22CZ2-80VHE-S-UNV-L940-CD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P389429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-S-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7263.1 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

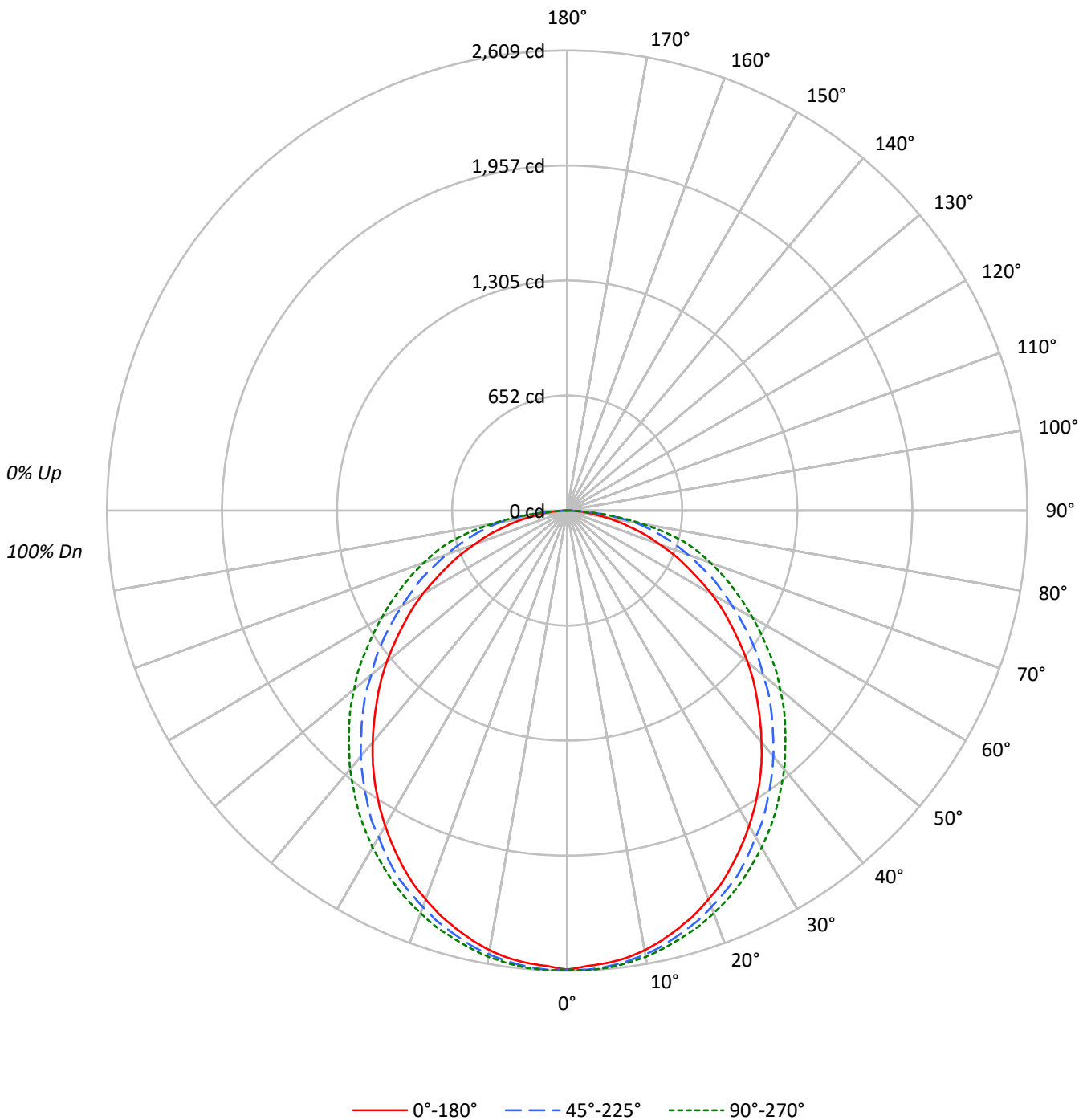
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	106	101	97	94	97	94	91		93	90	88		89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53		64	57	52		61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40		52	45	40		50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7004	7004	7004
5°	6957	7012	7030
10°	6917	6982	7019
15°	6826	6920	6986
20°	6715	6851	6958
25°	6581	6782	6913
30°	6413	6644	6855
35°	6234	6524	6791
40°	6023	6393	6726
45°	5804	6242	6655
50°	5590	6072	6597
55°	5326	5962	6550
60°	5089	5818	6529
65°	4747	5783	6603
70°	4373	5733	6799
75°	3946	5814	7152
80°	3414	5986	6722
85°	2825	5023	5023



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.1	3.4
10°-20°	700.4	9.6
20°-30°	1048.0	14.4
30°-40°	1241.1	17.1
40°-50°	1264.8	17.4
50°-60°	1133.6	15.6
60°-70°	887.6	12.2
70°-80°	572.3	7.9
80°-90°	169.1	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°	1994.5	27.5
0°-40°	3235.7	44.5
0°-60°	5634.1	77.6
0°-90°	7263.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7263.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2603	2603	2603	2603	2603	
5°	2576	2582	2596	2599	2603	245
15°	2450	2464	2484	2504	2508	691
25°	2216	2237	2284	2314	2328	1020
35°	1898	1921	1986	2047	2067	1186
45°	1525	1559	1640	1725	1749	1178
55°	1135	1172	1271	1359	1396	1018
65°	746	790	908	996	1037	741
75°	380	437	559	654	688	407
85°	92	125	163	163	163	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2602.6	2602.6	2602.6	2602.6	2602.6
2.5°	2585.7	2592.4	2606.0	2609.4	2609.4
5°	2575.5	2582.3	2595.8	2599.2	2602.6
7.5°	2558.5	2561.9	2578.9	2585.7	2589.0
10°	2531.4	2538.2	2555.2	2565.3	2568.7
12.5°	2494.2	2504.3	2524.7	2538.2	2541.6
15°	2450.1	2463.7	2484.0	2504.3	2507.7
17.5°	2402.7	2416.2	2443.3	2467.0	2473.8
20°	2345.0	2362.0	2392.5	2419.6	2429.8
22.5°	2287.4	2301.0	2338.3	2372.2	2382.3
25°	2216.3	2236.6	2284.0	2314.5	2328.1
27.5°	2141.7	2165.4	2212.9	2253.5	2267.1
30°	2063.8	2087.5	2138.3	2189.2	2206.1
32.5°	1982.4	2009.6	2070.6	2121.4	2138.3
35°	1897.7	1921.4	1985.8	2046.8	2067.2
37.5°	1809.6	1829.9	1904.5	1968.9	1989.2
40°	1714.7	1741.8	1819.8	1894.3	1914.7
42.5°	1619.8	1650.3	1728.3	1809.6	1829.9
45°	1525.0	1558.8	1640.2	1724.9	1748.6
47.5°	1433.5	1460.6	1552.1	1633.4	1667.3
50°	1335.2	1362.3	1450.4	1541.9	1575.8
52.5°	1233.5	1270.8	1365.7	1453.8	1494.5
55°	1135.2	1172.5	1270.8	1358.9	1396.2
57.5°	1043.7	1074.2	1175.9	1267.4	1304.7
60°	945.5	972.6	1081.0	1179.3	1213.2
62.5°	840.4	881.1	992.9	1084.4	1125.1
65°	745.5	789.6	908.2	996.3	1037.0
67.5°	657.4	698.1	813.3	908.2	952.3
70°	555.8	610.0	728.6	823.5	864.1
72.5°	474.4	521.9	643.9	738.8	782.8
75°	379.5	437.2	559.2	654.0	687.9
77.5°	301.6	359.2	474.4	549.0	565.9
80°	220.3	277.9	386.3	423.6	433.8
82.5°	149.1	203.3	277.9	288.0	291.4
85°	91.5	125.4	162.7	162.7	162.7
87.5°	44.1	50.8	57.6	54.2	54.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)