

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: P388206

Luminaire Tested: **22CZ2-80VHE-SQR-UNV-L940-CD1-SDWPD1-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: P388206
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-SQR-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6477.1 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

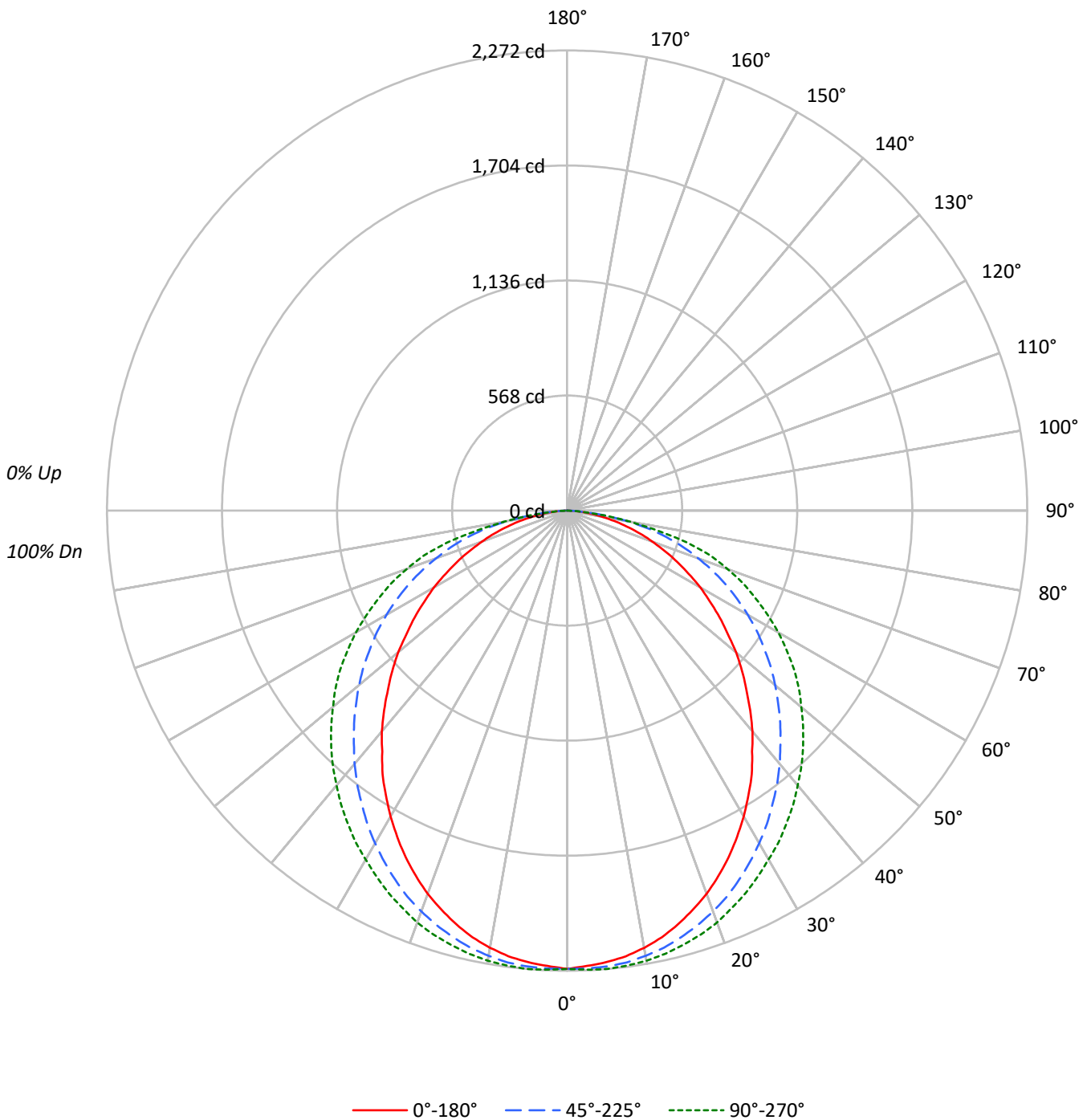
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6089	6089	6089
5°	6045	6103	6137
10°	5989	6099	6166
15°	5892	6072	6184
20°	5766	6030	6198
25°	5605	5970	6189
30°	5416	5894	6180
35°	5221	5807	6201
40°	5000	5734	6220
45°	4762	5662	6271
50°	4556	5611	6319
55°	4312	5567	6418
60°	4087	5543	6486
65°	3817	5500	6538
70°	3508	5418	6627
75°	3164	5273	6392
80°	2715	4669	4812
85°	2183	2754	2183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.5	3.3
10°-20°	613.3	9.5
20°-30°	921.1	14.2
30°-40°	1098.6	17.0
40°-50°	1135.8	17.5
50°-60°	1044.2	16.1
60°-70°	831.3	12.8
70°-80°	507.9	7.8
80°-90°	110.4	1.7
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°	1748.9	27.0
0°-40°	2847.4	44.0
0°-60°	5027.5	77.6
0°-90°	6477.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6477.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2263	2263	2263	2263	2263	
5°	2238	2244	2260	2269	2272	212
15°	2115	2140	2180	2210	2220	596
25°	1888	1934	2010	2066	2084	868
35°	1589	1657	1768	1860	1888	992
45°	1251	1340	1488	1608	1648	968
55°	919	1021	1187	1322	1368	822
65°	600	701	864	984	1027	594
75°	304	394	507	596	615	324
85°	71	86	89	77	71	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2262.6	2262.6	2262.6	2262.6	2262.6
2.5°	2250.3	2253.4	2262.6	2268.8	2268.8
5°	2238.0	2244.2	2259.5	2268.8	2271.8
7.5°	2219.6	2228.8	2250.3	2262.6	2265.7
10°	2191.9	2204.2	2231.9	2250.3	2256.5
12.5°	2158.1	2176.5	2210.3	2234.9	2241.1
15°	2115.0	2139.6	2179.6	2210.3	2219.6
17.5°	2065.9	2096.6	2145.8	2182.7	2195.0
20°	2013.6	2044.3	2105.8	2148.9	2164.2
22.5°	1952.1	1992.1	2062.8	2112.0	2124.3
25°	1887.6	1933.7	2010.5	2065.9	2084.3
27.5°	1816.8	1872.2	1955.2	2022.8	2038.2
30°	1743.1	1801.5	1896.8	1970.6	1989.0
32.5°	1666.2	1733.8	1835.3	1918.3	1942.9
35°	1589.4	1657.0	1767.7	1859.9	1887.6
37.5°	1500.2	1580.1	1703.1	1798.4	1832.2
40°	1423.4	1500.2	1632.4	1736.9	1770.7
42.5°	1337.3	1420.3	1558.6	1672.4	1712.3
45°	1251.2	1340.3	1487.9	1607.8	1647.8
47.5°	1171.3	1260.4	1414.1	1540.2	1580.1
50°	1088.3	1180.5	1340.3	1469.5	1509.4
52.5°	999.1	1100.6	1266.6	1395.7	1441.8
55°	919.2	1020.6	1186.6	1321.9	1368.0
57.5°	836.2	940.7	1112.9	1242.0	1285.0
60°	759.3	860.8	1029.9	1155.9	1205.1
62.5°	676.3	780.8	946.9	1069.8	1115.9
65°	599.5	700.9	863.8	983.7	1026.8
67.5°	522.6	624.1	777.8	891.5	940.7
70°	445.8	547.2	688.6	799.3	842.3
72.5°	378.1	467.3	602.5	704.0	744.0
75°	304.3	393.5	507.2	596.4	614.8
77.5°	236.7	316.6	411.9	451.9	458.1
80°	175.2	236.7	301.3	310.5	310.5
82.5°	116.8	162.9	187.5	190.6	187.5
85°	70.7	86.1	89.2	76.9	70.7
87.5°	24.6	24.6	15.4	9.2	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)