

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: P388207

Luminaire Tested: **22CZ2-80VHE-SQR-UNV-L940-CD1-SWPD1-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: P388207
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-SWPD1-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: 6556.2 lumens
Efficiency: N/A
Efficacy: 110.9 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

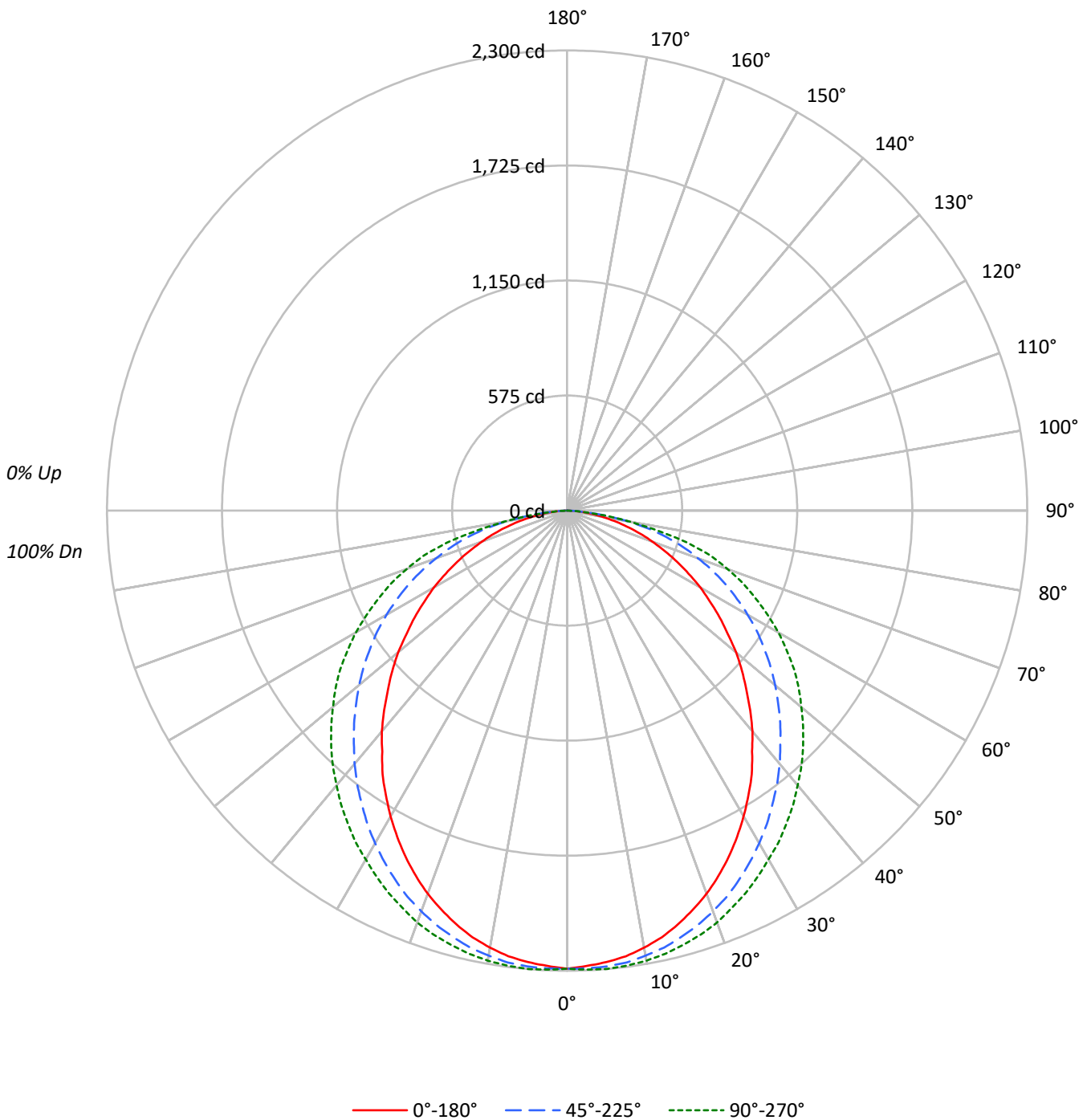
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	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	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6163	6163	6163
5°	6119	6178	6212
10°	6063	6173	6241
15°	5964	6146	6259
20°	5837	6104	6273
25°	5673	6043	6264
30°	5482	5966	6256
35°	5285	5878	6276
40°	5061	5804	6296
45°	4820	5732	6347
50°	4612	5680	6396
55°	4365	5635	6496
60°	4137	5610	6565
65°	3864	5568	6618
70°	3550	5484	6708
75°	3203	5338	6470
80°	2749	4727	4871
85°	2211	2785	2211



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.1	3.3
10°-20°	620.8	9.5
20°-30°	932.4	14.2
30°-40°	1112.0	17.0
40°-50°	1149.7	17.5
50°-60°	1057.0	16.1
60°-70°	841.5	12.8
70°-80°	514.1	7.8
80°-90°	111.7	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°	1770.2	27.0
0°-40°	2882.2	44.0
0°-60°	5088.9	77.6
0°-90°	6556.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6556.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2290	2290	2290	2290	2290	
5°	2265	2272	2287	2296	2300	215
15°	2141	2166	2206	2237	2247	603
25°	1911	1957	2035	2091	2110	879
35°	1609	1677	1789	1883	1911	1004
45°	1266	1357	1506	1627	1668	979
55°	930	1033	1201	1338	1385	832
65°	607	710	874	996	1039	601
75°	308	398	513	604	622	328
85°	72	87	90	78	72	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2290.2	2290.2	2290.2	2290.2	2290.2
2.5°	2277.8	2280.9	2290.2	2296.5	2296.5
5°	2265.3	2271.6	2287.1	2296.5	2299.6
7.5°	2246.7	2256.0	2277.8	2290.2	2293.4
10°	2218.7	2231.1	2259.1	2277.8	2284.0
12.5°	2184.4	2203.1	2237.3	2262.2	2268.5
15°	2140.9	2165.8	2206.2	2237.3	2246.7
17.5°	2091.1	2122.2	2172.0	2209.3	2221.8
20°	2038.2	2069.3	2131.5	2175.1	2190.7
22.5°	1976.0	2016.4	2088.0	2137.8	2150.2
25°	1910.6	1957.3	2035.1	2091.1	2109.8
27.5°	1839.0	1895.0	1979.1	2047.5	2063.1
30°	1764.4	1823.5	1919.9	1994.6	2013.3
32.5°	1686.6	1755.0	1857.7	1941.7	1966.6
35°	1608.8	1677.2	1789.2	1882.6	1910.6
37.5°	1518.5	1599.4	1723.9	1820.4	1854.6
40°	1440.7	1518.5	1652.3	1758.1	1792.4
42.5°	1353.6	1437.6	1577.7	1692.8	1733.2
45°	1266.5	1356.7	1506.1	1627.4	1667.9
47.5°	1185.6	1275.8	1431.4	1559.0	1599.4
50°	1101.6	1194.9	1356.7	1487.4	1527.9
52.5°	1011.3	1114.0	1282.0	1412.7	1459.4
55°	930.4	1033.1	1201.1	1338.0	1384.7
57.5°	846.4	952.2	1126.4	1257.1	1300.7
60°	768.6	871.3	1042.4	1170.0	1219.8
62.5°	684.6	790.4	958.4	1082.9	1129.6
65°	606.8	709.5	874.4	995.8	1039.3
67.5°	529.0	631.7	787.3	902.4	952.2
70°	451.2	553.9	697.0	809.1	852.6
72.5°	382.7	473.0	609.9	712.6	753.0
75°	308.1	398.3	513.4	603.7	622.3
77.5°	239.6	320.5	417.0	457.4	463.6
80°	177.4	239.6	305.0	314.3	314.3
82.5°	118.2	164.9	189.8	192.9	189.8
85°	71.6	87.1	90.2	77.8	71.6
87.5°	24.9	24.9	15.6	9.3	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)