

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: P388203

Luminaire Tested: **22CZ2-80VHE-SQR-UNV-L935-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: P388203
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6410.8 lumens
Efficiency: N/A
Efficacy: 108.5 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

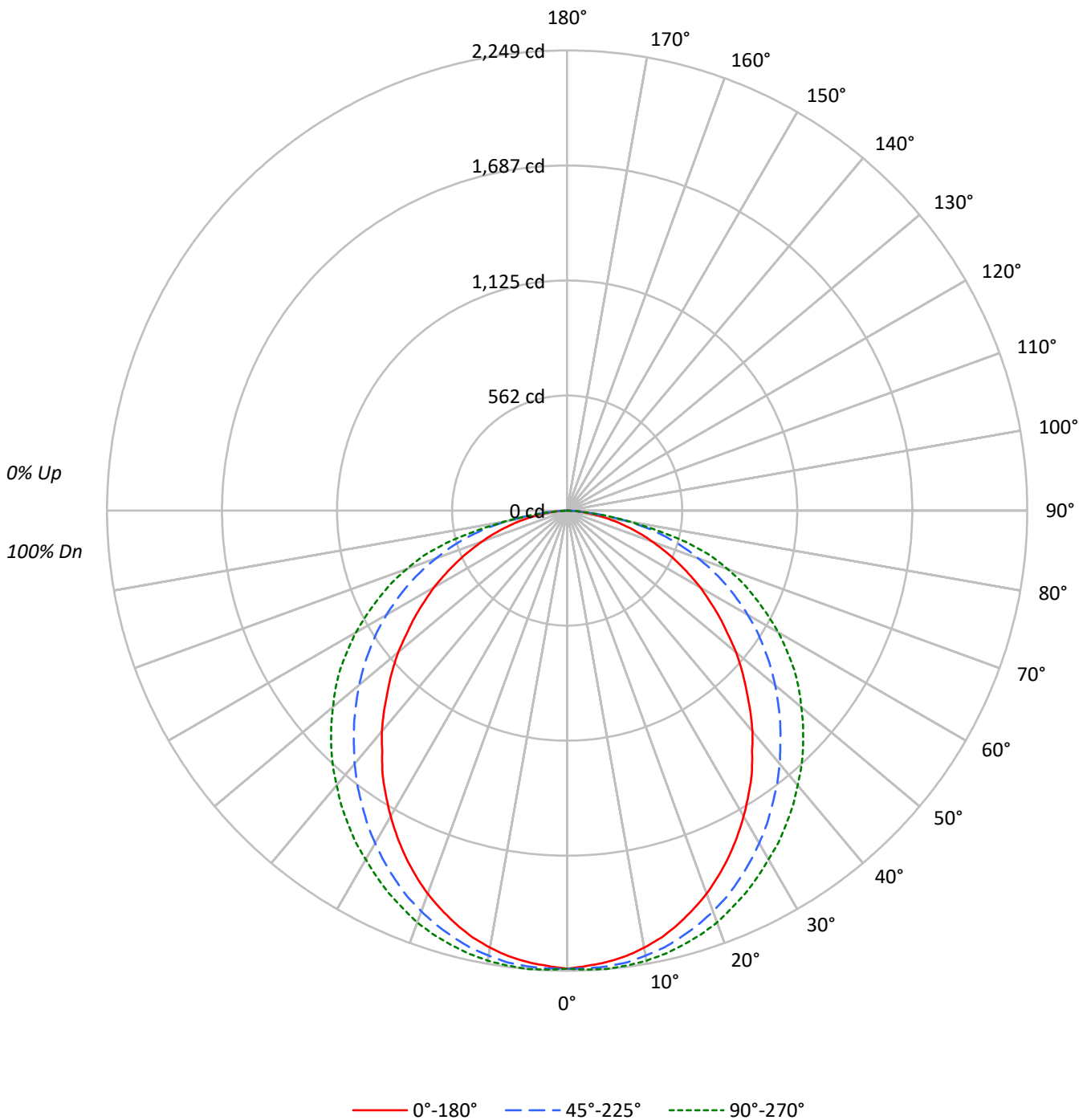
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6026	6026	6026
5°	5984	6041	6074
10°	5928	6036	6103
15°	5832	6010	6120
20°	5707	5969	6134
25°	5547	5908	6125
30°	5361	5834	6117
35°	5168	5748	6137
40°	4949	5676	6157
45°	4713	5605	6207
50°	4509	5554	6255
55°	4268	5510	6352
60°	4045	5486	6419
65°	3778	5444	6471
70°	3471	5363	6559
75°	3132	5219	6327
80°	2687	4621	4762
85°	2161	2723	2161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.3	3.3
10°-20°	607.0	9.5
20°-30°	911.7	14.2
30°-40°	1087.3	17.0
40°-50°	1124.2	17.5
50°-60°	1033.6	16.1
60°-70°	822.8	12.8
70°-80°	502.7	7.8
80°-90°	109.3	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°	1731.0	27.0
0°-40°	2818.3	44.0
0°-60°	4976.0	77.6
0°-90°	6410.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6410.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2239	2239	2239	2239	2239	
5°	2215	2221	2236	2246	2249	210
15°	2093	2118	2157	2188	2197	590
25°	1868	1914	1990	2045	2063	859
35°	1573	1640	1750	1841	1868	981
45°	1238	1327	1473	1591	1631	958
55°	910	1010	1174	1308	1354	814
65°	593	694	855	974	1016	588
75°	301	390	502	590	608	321
85°	70	85	88	76	70	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2239.4	2239.4	2239.4	2239.4	2239.4
2.5°	2227.3	2230.3	2239.4	2245.5	2245.5
5°	2215.1	2221.2	2236.4	2245.5	2248.6
7.5°	2196.8	2206.0	2227.3	2239.4	2242.5
10°	2169.5	2181.6	2209.0	2227.3	2233.4
12.5°	2136.0	2154.3	2187.7	2212.1	2218.1
15°	2093.4	2117.7	2157.3	2187.7	2196.8
17.5°	2044.7	2075.1	2123.8	2160.3	2172.5
20°	1993.0	2023.4	2084.3	2126.9	2142.1
22.5°	1932.1	1971.7	2041.7	2090.4	2102.5
25°	1868.2	1913.9	1989.9	2044.7	2063.0
27.5°	1798.3	1853.0	1935.2	2002.1	2017.3
30°	1725.2	1783.0	1877.4	1950.4	1968.6
32.5°	1649.2	1716.1	1816.5	1898.7	1923.0
35°	1573.1	1640.0	1749.6	1840.8	1868.2
37.5°	1484.9	1564.0	1685.7	1780.0	1813.5
40°	1408.8	1484.9	1615.7	1719.1	1752.6
42.5°	1323.6	1405.7	1542.7	1655.2	1694.8
45°	1238.4	1326.6	1472.7	1591.3	1630.9
47.5°	1159.3	1247.5	1399.7	1524.4	1564.0
50°	1077.1	1168.4	1326.6	1454.4	1494.0
52.5°	988.9	1089.3	1253.6	1381.4	1427.0
55°	909.8	1010.2	1174.5	1308.4	1354.0
57.5°	827.6	931.1	1101.5	1229.3	1271.9
60°	751.6	852.0	1019.3	1144.1	1192.7
62.5°	669.4	772.9	937.2	1058.9	1104.5
65°	593.3	693.7	855.0	973.7	1016.3
67.5°	517.3	617.7	769.8	882.4	931.1
70°	441.2	541.6	681.6	791.1	833.7
72.5°	374.3	462.5	596.4	696.8	736.3
75°	301.2	389.5	502.0	590.3	608.5
77.5°	234.3	313.4	407.7	447.3	453.4
80°	173.4	234.3	298.2	307.3	307.3
82.5°	115.6	161.3	185.6	188.6	185.6
85°	70.0	85.2	88.2	76.1	70.0
87.5°	24.3	24.3	15.2	9.1	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)