

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: P388225

Luminaire Tested: **22CZ2-85VHE-SQR-UNV-L930-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: P388225
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: 22CZ2-85VHE-SQR-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6741.7 lumens
Efficiency: N/A
Efficacy: 106.0 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

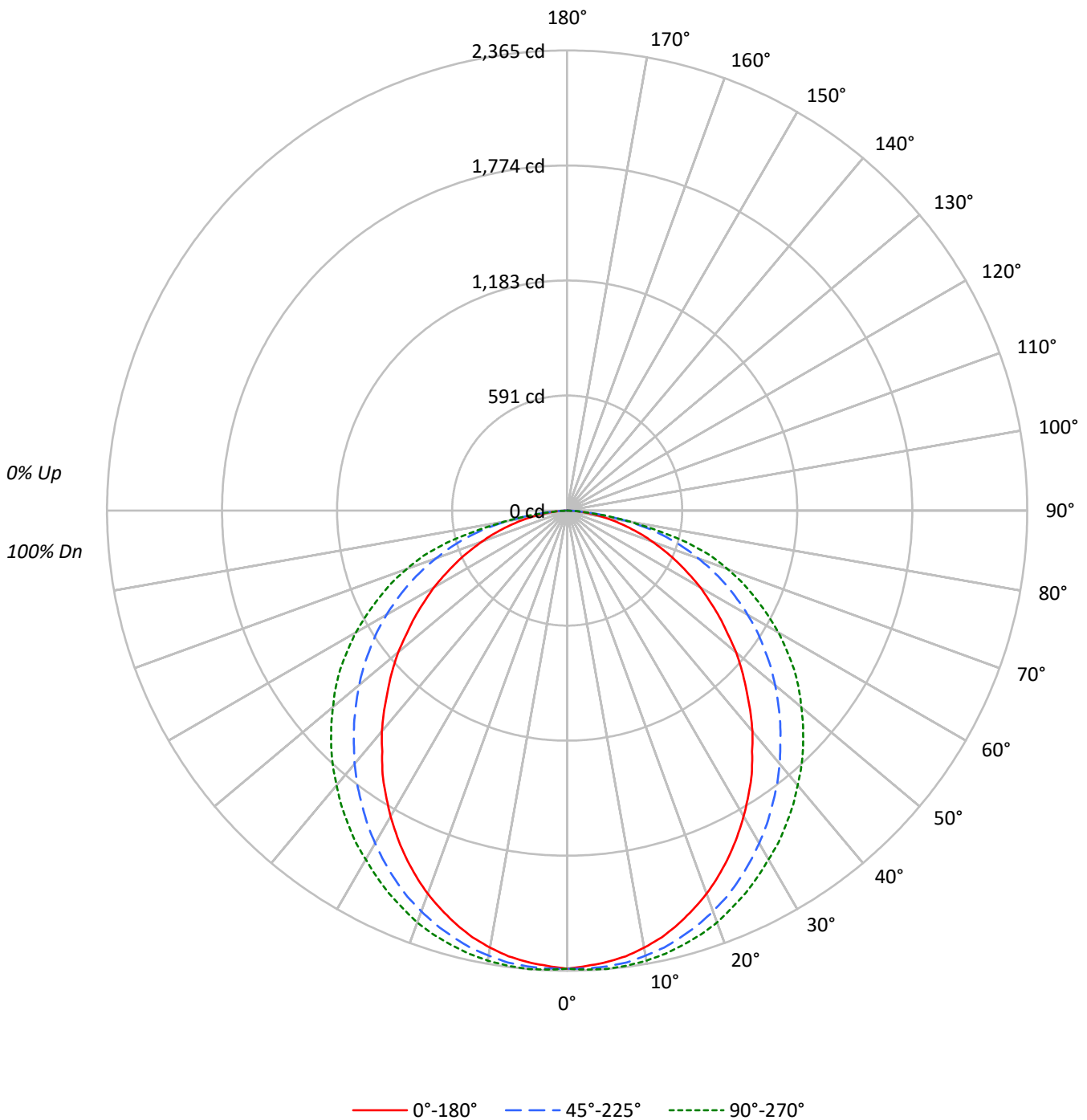
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6337	6337	6337
5°	6292	6353	6387
10°	6234	6348	6418
15°	6133	6320	6436
20°	6002	6277	6451
25°	5834	6214	6442
30°	5638	6135	6433
35°	5435	6044	6454
40°	5204	5969	6474
45°	4956	5894	6527
50°	4742	5840	6577
55°	4488	5795	6680
60°	4253	5769	6751
65°	3973	5725	6805
70°	3651	5640	6898
75°	3294	5490	6654
80°	2827	4860	5009
85°	2272	2865	2272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.3	3.3
10°-20°	638.3	9.5
20°-30°	958.7	14.2
30°-40°	1143.4	17.0
40°-50°	1182.2	17.5
50°-60°	1086.9	16.1
60°-70°	865.3	12.8
70°-80°	528.7	7.8
80°-90°	114.9	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°	1820.3	27.0
0°-40°	2963.8	44.0
0°-60°	5232.9	77.6
0°-90°	6741.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6741.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2355	2355	2355	2355	2355	
5°	2329	2336	2352	2361	2365	221
15°	2201	2227	2269	2301	2310	620
25°	1965	2013	2093	2150	2170	904
35°	1654	1725	1840	1936	1965	1032
45°	1302	1395	1549	1674	1715	1007
55°	957	1062	1235	1376	1424	856
65°	624	730	899	1024	1069	618
75°	317	410	528	621	640	337
85°	74	90	93	80	74	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2355.0	2355.0	2355.0	2355.0	2355.0
2.5°	2342.2	2345.4	2355.0	2361.4	2361.4
5°	2329.4	2335.8	2351.8	2361.4	2364.6
7.5°	2310.2	2319.8	2342.2	2355.0	2358.2
10°	2281.4	2294.2	2323.0	2342.2	2348.6
12.5°	2246.2	2265.4	2300.6	2326.2	2332.6
15°	2201.4	2227.0	2268.6	2300.6	2310.2
17.5°	2150.3	2182.3	2233.4	2271.8	2284.6
20°	2095.9	2127.9	2191.8	2236.6	2252.6
22.5°	2031.9	2073.5	2147.1	2198.2	2211.0
25°	1964.7	2012.7	2092.7	2150.3	2169.5
27.5°	1891.1	1948.7	2035.1	2105.5	2121.5
30°	1814.3	1875.1	1974.3	2051.1	2070.3
32.5°	1734.3	1804.7	1910.3	1996.7	2022.3
35°	1654.3	1724.7	1839.9	1935.9	1964.7
37.5°	1561.5	1644.7	1772.7	1871.9	1907.1
40°	1481.5	1561.5	1699.1	1807.9	1843.1
42.5°	1391.9	1478.3	1622.3	1740.7	1782.3
45°	1302.3	1395.1	1548.7	1673.5	1715.1
47.5°	1219.1	1311.9	1471.9	1603.1	1644.7
50°	1132.7	1228.7	1395.1	1529.5	1571.1
52.5°	1039.9	1145.5	1318.3	1452.7	1500.7
55°	956.7	1062.3	1235.1	1375.9	1423.9
57.5°	870.3	979.1	1158.3	1292.7	1337.5
60°	790.3	895.9	1071.9	1203.1	1254.3
62.5°	704.0	812.7	985.5	1113.5	1161.5
65°	624.0	729.5	899.1	1023.9	1068.7
67.5°	544.0	649.6	809.5	927.9	979.1
70°	464.0	569.6	716.8	831.9	876.7
72.5°	393.6	486.4	627.2	732.7	774.3
75°	316.8	409.6	528.0	620.8	640.0
77.5°	246.4	329.6	428.8	470.4	476.8
80°	182.4	246.4	313.6	323.2	323.2
82.5°	121.6	169.6	195.2	198.4	195.2
85°	73.6	89.6	92.8	80.0	73.6
87.5°	25.6	25.6	16.0	9.6	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)