

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: P388230

Luminaire Tested: **22CZ2-85VHE-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: P388230
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-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: 6895.7 lumens
Efficiency: N/A
Efficacy: 108.4 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

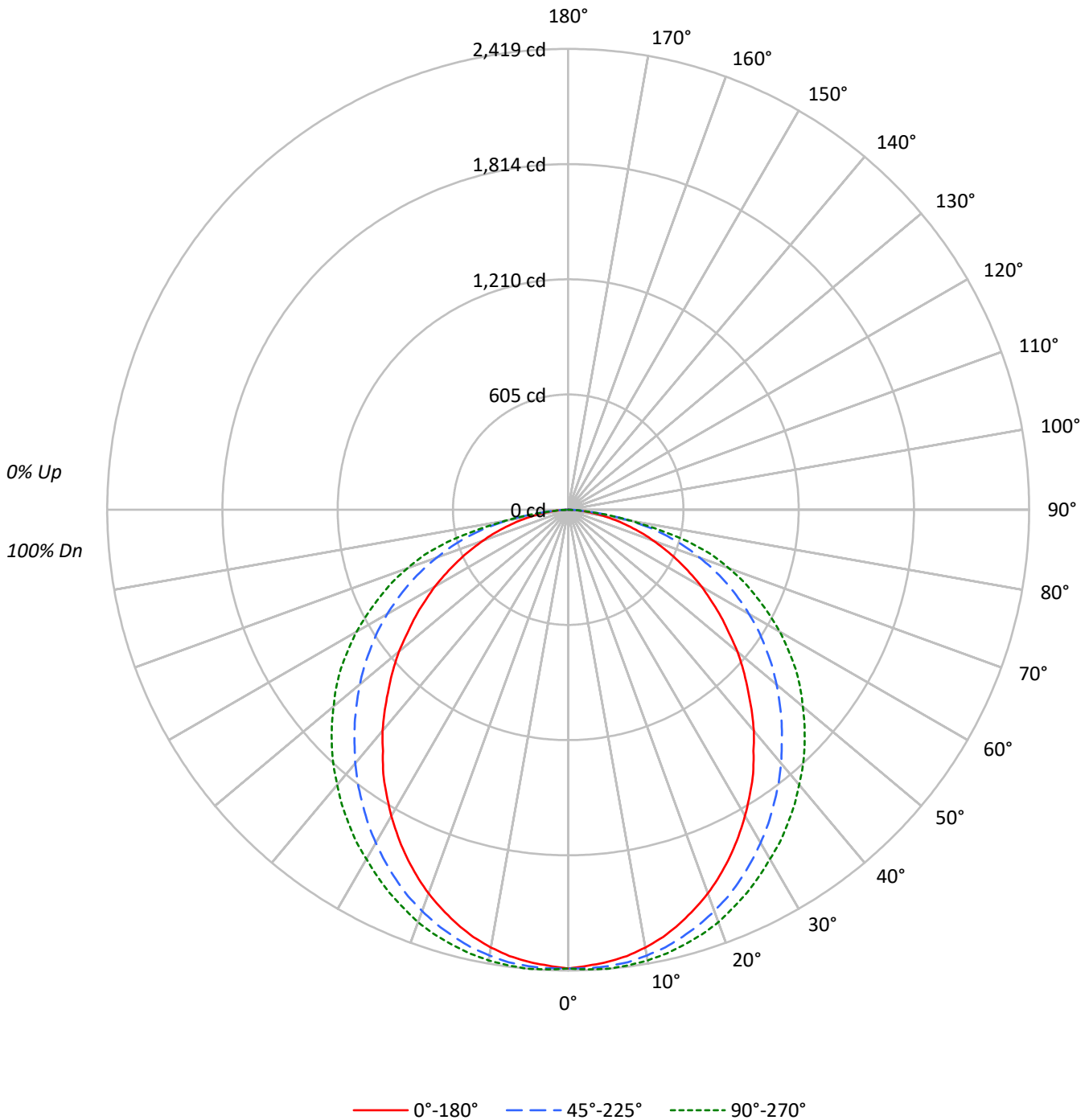
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6482	6482	6482
5°	6436	6498	6534
10°	6377	6493	6564
15°	6273	6465	6583
20°	6139	6420	6598
25°	5967	6356	6589
30°	5766	6275	6580
35°	5559	6182	6601
40°	5323	6105	6622
45°	5069	6028	6676
50°	4850	5974	6728
55°	4591	5927	6833
60°	4351	5901	6905
65°	4064	5856	6960
70°	3734	5768	7056
75°	3369	5614	6806
80°	2892	4970	5123
85°	2325	2930	2325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.4	3.3
10°-20°	652.9	9.5
20°-30°	980.6	14.2
30°-40°	1169.6	17.0
40°-50°	1209.2	17.5
50°-60°	1111.7	16.1
60°-70°	885.0	12.8
70°-80°	540.7	7.8
80°-90°	117.5	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°	1861.9	27.0
0°-40°	3031.5	44.0
0°-60°	5352.4	77.6
0°-90°	6895.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6895.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2409	2409	2409	2409	2409	
5°	2383	2389	2406	2415	2419	226
15°	2252	2278	2320	2353	2363	634
25°	2010	2059	2140	2199	2219	924
35°	1692	1764	1882	1980	2010	1056
45°	1332	1427	1584	1712	1754	1030
55°	979	1087	1263	1407	1456	875
65°	638	746	920	1047	1093	632
75°	324	419	540	635	655	345
85°	75	92	95	82	75	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2408.8	2408.8	2408.8	2408.8	2408.8
2.5°	2395.7	2399.0	2408.8	2415.4	2415.4
5°	2382.7	2389.2	2405.6	2415.4	2418.7
7.5°	2363.0	2372.8	2395.7	2408.8	2412.1
10°	2333.6	2346.6	2376.1	2395.7	2402.3
12.5°	2297.6	2317.2	2353.2	2379.4	2385.9
15°	2251.7	2277.9	2320.5	2353.2	2363.0
17.5°	2199.4	2232.1	2284.5	2323.7	2336.8
20°	2143.7	2176.5	2241.9	2287.7	2304.1
22.5°	2078.3	2120.8	2196.1	2248.5	2261.6
25°	2009.5	2058.6	2140.5	2199.4	2219.0
27.5°	1934.3	1993.2	2081.5	2153.6	2169.9
30°	1855.7	1917.9	2019.4	2097.9	2117.5
32.5°	1773.9	1845.9	1953.9	2042.3	2068.5
35°	1692.1	1764.1	1881.9	1980.1	2009.5
37.5°	1597.2	1682.3	1813.2	1914.6	1950.6
40°	1515.3	1597.2	1737.9	1849.2	1885.2
42.5°	1423.7	1512.1	1659.3	1780.4	1823.0
45°	1332.1	1427.0	1584.1	1711.7	1754.3
47.5°	1247.0	1341.9	1505.5	1639.7	1682.3
50°	1158.6	1256.8	1427.0	1564.4	1607.0
52.5°	1063.7	1171.7	1348.4	1485.9	1535.0
55°	978.6	1086.6	1263.3	1407.3	1456.4
57.5°	890.2	1001.5	1184.8	1322.2	1368.1
60°	808.4	916.4	1096.4	1230.6	1283.0
62.5°	720.0	831.3	1008.0	1139.0	1188.1
65°	638.2	746.2	919.7	1047.3	1093.1
67.5°	556.4	664.4	828.0	949.1	1001.5
70°	474.6	582.6	733.1	850.9	896.8
72.5°	402.6	497.5	641.5	749.5	792.0
75°	324.0	418.9	540.0	634.9	654.6
77.5°	252.0	337.1	438.6	481.1	487.7
80°	186.6	252.0	320.7	330.6	330.6
82.5°	124.4	173.5	199.6	202.9	199.6
85°	75.3	91.6	94.9	81.8	75.3
87.5°	26.2	26.2	16.4	9.8	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)