

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: P389405

Luminaire Tested: **22CZ2-75VHE-S-UNV-L940-CD1-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: P389405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-75VHE-S-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6782.9 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

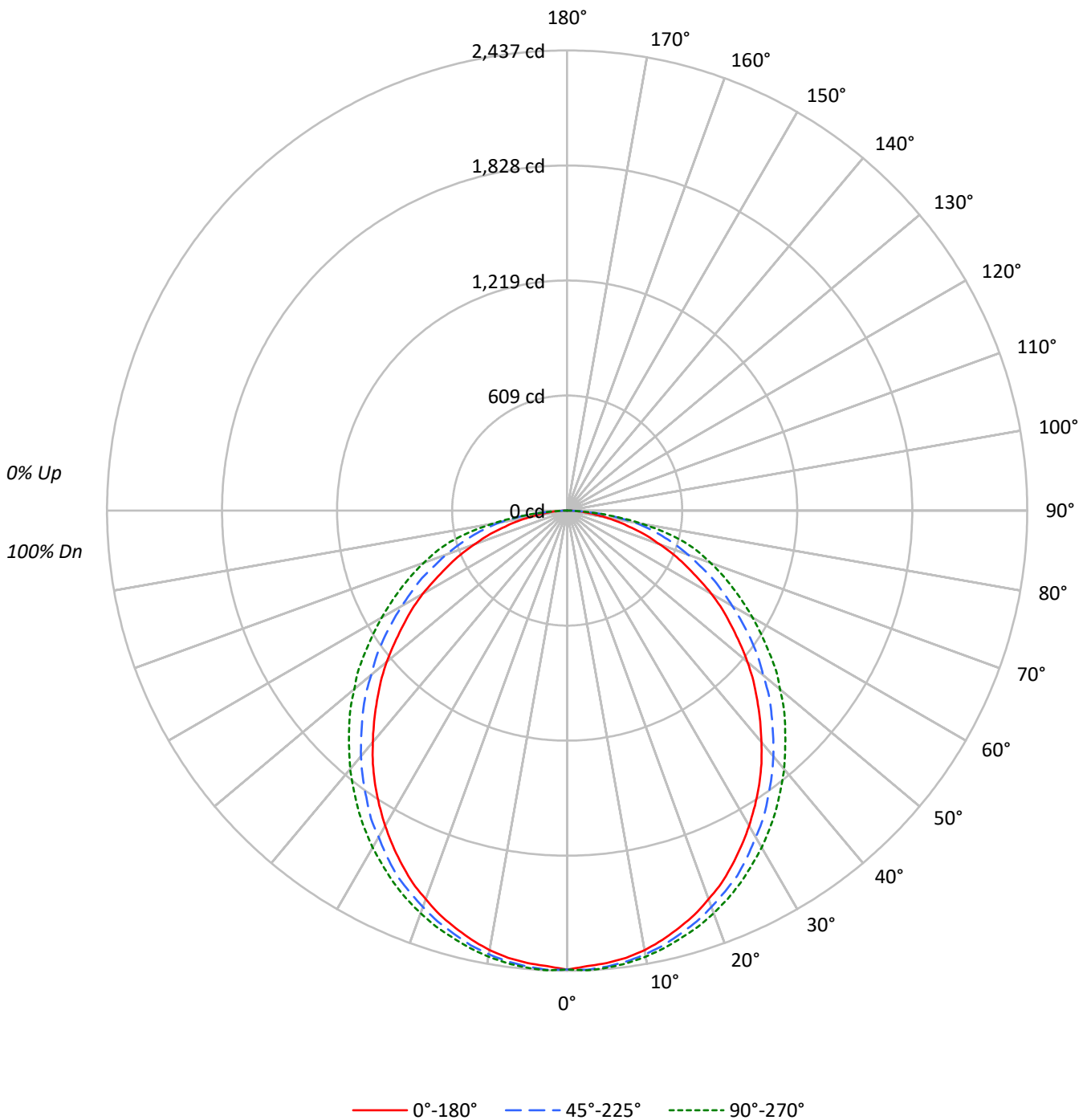
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389405

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389405

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L940-CD1-U

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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6540	6540	6540
5°	6497	6548	6565
10°	6460	6520	6555
15°	6374	6463	6524
20°	6271	6398	6498
25°	6145	6333	6456
30°	5989	6205	6402
35°	5822	6092	6342
40°	5625	5970	6281
45°	5420	5829	6215
50°	5220	5671	6161
55°	4974	5568	6117
60°	4752	5434	6098
65°	4433	5401	6166
70°	4083	5353	6349
75°	3686	5429	6679
80°	3188	5591	6278
85°	2637	4690	4690



TEST NUMBER: P389405

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.8	3.4
10°-20°	654.1	9.6
20°-30°	978.7	14.4
30°-40°	1159.1	17.1
40°-50°	1181.2	17.4
50°-60°	1058.7	15.6
60°-70°	828.9	12.2
70°-80°	534.5	7.9
80°-90°	157.9	2.3
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°	1862.7	27.5
0°-40°	3021.7	44.5
0°-60°	5261.7	77.6
0°-90°	6782.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6782.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2430	2430	2430	2430	2430	
5°	2405	2412	2424	2427	2430	228
15°	2288	2301	2320	2339	2342	645
25°	2070	2089	2133	2162	2174	953
35°	1772	1794	1854	1912	1930	1108
45°	1424	1456	1532	1611	1633	1100
55°	1060	1095	1187	1269	1304	951
65°	696	737	848	930	968	692
75°	354	408	522	611	642	380
85°	85	117	152	152	152	100
90°	0	0	0	0	0	



TEST NUMBER: P389405

CATALOG NUMBER: 22CZ2-75VHE-S-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2430.5	2430.5	2430.5	2430.5	2430.5
2.5°	2414.7	2421.0	2433.7	2436.9	2436.9
5°	2405.2	2411.5	2424.2	2427.4	2430.5
7.5°	2389.4	2392.5	2408.4	2414.7	2417.9
10°	2364.1	2370.4	2386.2	2395.7	2398.9
12.5°	2329.3	2338.7	2357.7	2370.4	2373.6
15°	2288.1	2300.8	2319.8	2338.7	2341.9
17.5°	2243.8	2256.5	2281.8	2303.9	2310.3
20°	2190.0	2205.8	2234.3	2259.6	2269.1
22.5°	2136.2	2148.9	2183.7	2215.3	2224.8
25°	2069.7	2088.7	2133.0	2161.5	2174.2
27.5°	2000.1	2022.3	2066.6	2104.6	2117.2
30°	1927.3	1949.5	1997.0	2044.4	2060.2
32.5°	1851.4	1876.7	1933.7	1981.1	1997.0
35°	1772.3	1794.4	1854.5	1911.5	1930.5
37.5°	1690.0	1709.0	1778.6	1838.7	1857.7
40°	1601.4	1626.7	1699.5	1769.1	1788.1
42.5°	1512.7	1541.2	1614.0	1690.0	1709.0
45°	1424.1	1455.8	1531.7	1610.9	1633.0
47.5°	1338.7	1364.0	1449.5	1525.4	1557.1
50°	1246.9	1272.2	1354.5	1440.0	1471.6
52.5°	1152.0	1186.8	1275.4	1357.7	1395.7
55°	1060.2	1095.0	1186.8	1269.1	1303.9
57.5°	974.7	1003.2	1098.2	1183.6	1218.4
60°	883.0	908.3	1009.6	1101.3	1133.0
62.5°	784.9	822.8	927.3	1012.7	1050.7
65°	696.2	737.4	848.2	930.4	968.4
67.5°	614.0	651.9	759.5	848.2	889.3
70°	519.0	569.7	680.4	769.0	807.0
72.5°	443.1	487.4	601.3	689.9	731.1
75°	354.5	408.3	522.2	610.8	642.4
77.5°	281.7	335.5	443.1	512.7	528.5
80°	205.7	259.5	360.8	395.6	405.1
82.5°	139.2	189.9	259.5	269.0	272.2
85°	85.4	117.1	151.9	151.9	151.9
87.5°	41.1	47.5	53.8	50.6	50.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)