

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: P389142

Luminaire Tested: **22CZ2-20VHE-S-UNV-L950-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: P389142
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: 22CZ2-20VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1866.5 lumens
Efficiency: N/A
Efficacy: 131.4 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

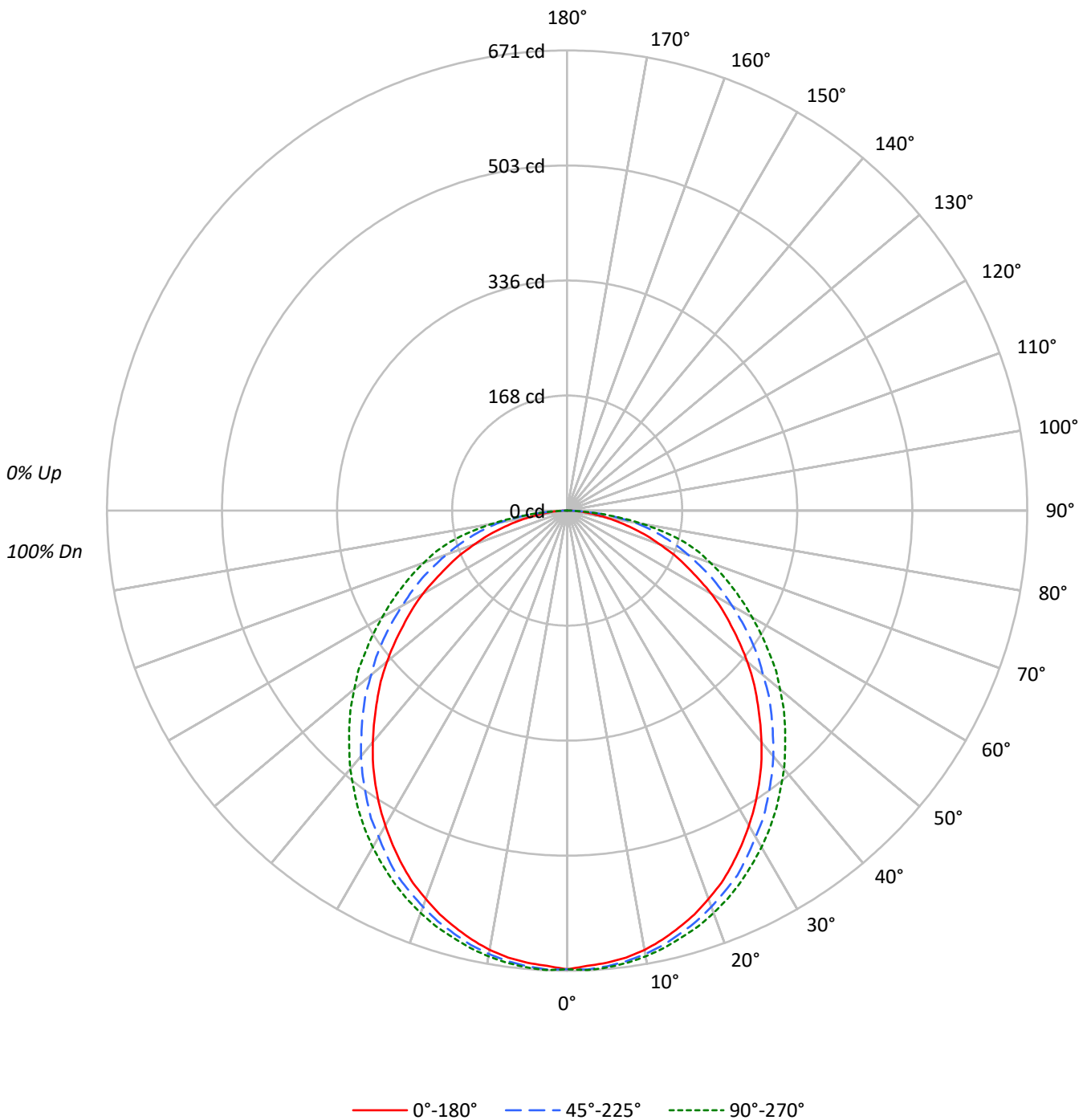
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P389142

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-L950-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389142

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-L950-CD1-SDWPD1-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°	1800	1800	1800
5°	1788	1802	1807
10°	1777	1794	1804
15°	1754	1778	1795
20°	1726	1761	1788
25°	1691	1743	1776
30°	1648	1707	1762
35°	1602	1676	1745
40°	1548	1643	1728
45°	1491	1604	1710
50°	1436	1560	1696
55°	1369	1532	1683
60°	1308	1495	1678
65°	1220	1486	1697
70°	1124	1473	1747
75°	1014	1494	1838
80°	877	1539	1728
85°	726	1291	1291



TEST NUMBER: P389142

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-L950-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	3.4
10°-20°	180.0	9.6
20°-30°	269.3	14.4
30°-40°	318.9	17.1
40°-50°	325.0	17.4
50°-60°	291.3	15.6
60°-70°	228.1	12.2
70°-80°	147.1	7.9
80°-90°	43.4	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°	512.6	27.5
0°-40°	831.5	44.5
0°-60°	1447.9	77.6
0°-90°	1866.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1866.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	662	664	667	668	669	63
15°	630	633	638	644	644	178
25°	570	575	587	595	598	262
35°	488	494	510	526	531	305
45°	392	401	422	443	449	303
55°	292	301	327	349	359	262
65°	192	203	233	256	266	190
75°	98	112	144	168	177	105
85°	24	32	42	42	42	28
90°	0	0	0	0	0	



TEST NUMBER: P389142

CATALOG NUMBER: 22CZ2-20VHE-S-UNV-L950-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	668.8	668.8	668.8	668.8	668.8
2.5°	664.5	666.2	669.7	670.6	670.6
5°	661.9	663.6	667.1	668.0	668.8
7.5°	657.5	658.4	662.7	664.5	665.3
10°	650.5	652.3	656.6	659.2	660.1
12.5°	641.0	643.6	648.8	652.3	653.1
15°	629.6	633.1	638.3	643.6	644.4
17.5°	617.4	620.9	627.9	634.0	635.7
20°	602.6	607.0	614.8	621.8	624.4
22.5°	587.8	591.3	600.9	609.6	612.2
25°	569.5	574.8	587.0	594.8	598.3
27.5°	550.4	556.5	568.7	579.1	582.6
30°	530.4	536.5	549.5	562.6	566.9
32.5°	509.5	516.4	532.1	545.2	549.5
35°	487.7	493.8	510.3	526.0	531.2
37.5°	465.0	470.3	489.4	506.0	511.2
40°	440.7	447.6	467.7	486.8	492.0
42.5°	416.3	424.1	444.1	465.0	470.3
45°	391.9	400.6	421.5	443.3	449.4
47.5°	368.4	375.3	398.9	419.8	428.5
50°	343.1	350.1	372.7	396.2	405.0
52.5°	317.0	326.6	351.0	373.6	384.1
55°	291.7	301.3	326.6	349.2	358.8
57.5°	268.2	276.1	302.2	325.7	335.3
60°	243.0	249.9	277.8	303.1	311.8
62.5°	216.0	226.4	255.2	278.7	289.1
65°	191.6	202.9	233.4	256.0	266.5
67.5°	168.9	179.4	209.0	233.4	244.7
70°	142.8	156.8	187.2	211.6	222.1
72.5°	121.9	134.1	165.5	189.8	201.2
75°	97.5	112.3	143.7	168.1	176.8
77.5°	77.5	92.3	121.9	141.1	145.4
80°	56.6	71.4	99.3	108.9	111.5
82.5°	38.3	52.3	71.4	74.0	74.9
85°	23.5	32.2	41.8	41.8	41.8
87.5°	11.3	13.1	14.8	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)