

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: P387802

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L950-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: P387802
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: 22CZ2-29HE-SQR-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2530.1 lumens
Efficiency: N/A
Efficacy: 114.0 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

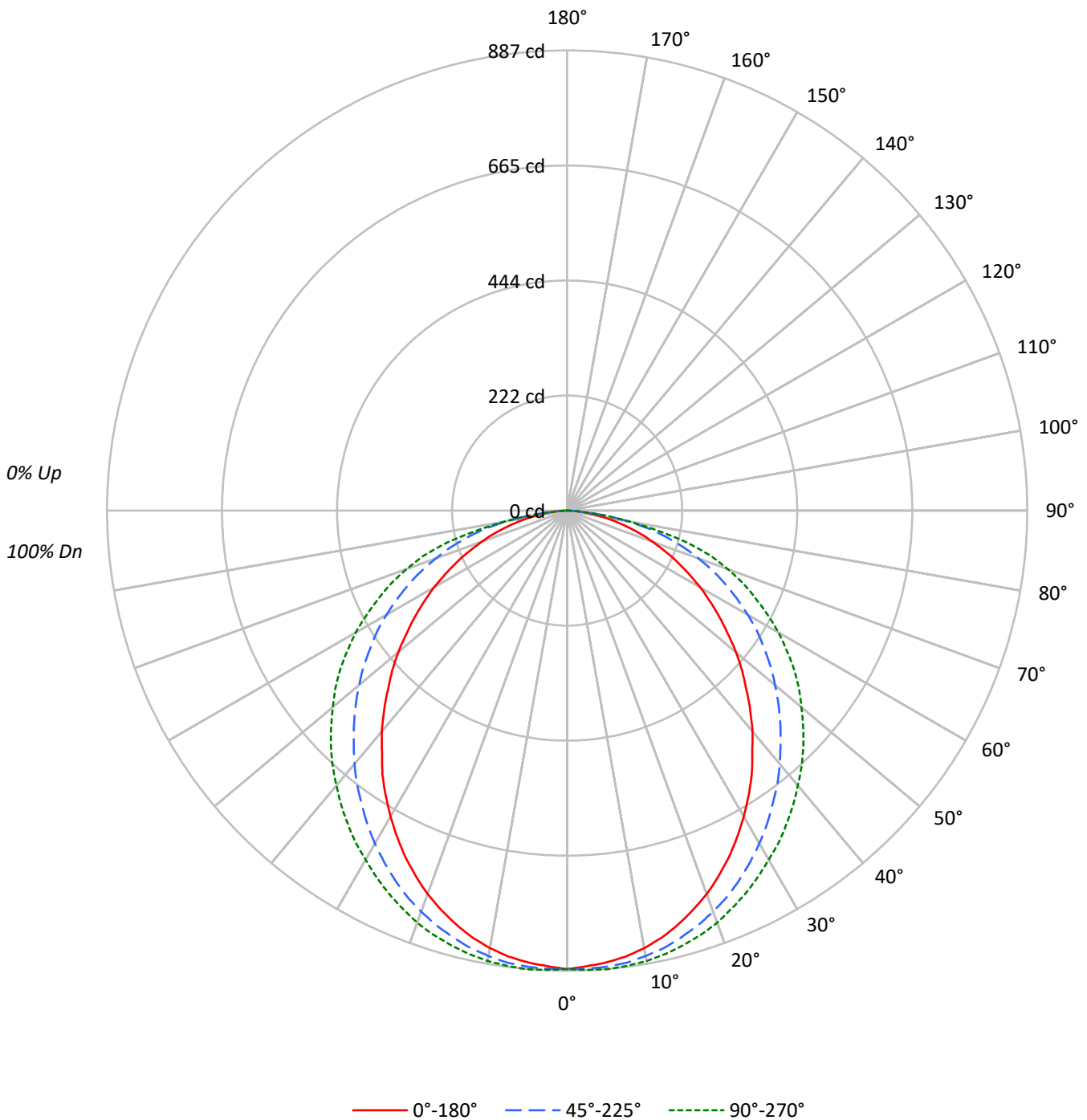
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387802

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L950-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387802

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L950-CD1-SWPD1-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	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°	2378	2378	2378
5°	2361	2384	2397
10°	2340	2382	2408
15°	2302	2372	2415
20°	2253	2356	2421
25°	2189	2332	2417
30°	2116	2302	2414
35°	2039	2268	2422
40°	1953	2240	2430
45°	1860	2212	2450
50°	1780	2192	2468
55°	1685	2175	2507
60°	1596	2165	2533
65°	1491	2148	2554
70°	1370	2116	2589
75°	1236	2060	2497
80°	1060	1824	1880
85°	852	1074	852



TEST NUMBER: P387802

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L950-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	3.3
10°-20°	239.6	9.5
20°-30°	359.8	14.2
30°-40°	429.1	17.0
40°-50°	443.7	17.5
50°-60°	407.9	16.1
60°-70°	324.7	12.8
70°-80°	198.4	7.8
80°-90°	43.1	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°	683.2	27.0
0°-40°	1112.3	44.0
0°-60°	1963.8	77.6
0°-90°	2530.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2530.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	874	877	883	886	887	83
15°	826	836	851	863	867	233
25°	737	755	785	807	814	339
35°	621	647	690	726	737	387
45°	489	524	581	628	644	378
55°	359	399	464	516	534	321
65°	234	274	337	384	401	232
75°	119	154	198	233	240	127
85°	28	34	35	30	28	32
90°	0	0	0	0	0	



TEST NUMBER: P387802

CATALOG NUMBER: 22CZ2-29HE-SQR-UNV-L950-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	883.8	883.8	883.8	883.8	883.8
2.5°	879.0	880.2	883.8	886.2	886.2
5°	874.2	876.6	882.6	886.2	887.4
7.5°	867.0	870.6	879.0	883.8	885.0
10°	856.2	861.0	871.8	879.0	881.4
12.5°	843.0	850.2	863.4	873.0	875.4
15°	826.2	835.8	851.4	863.4	867.0
17.5°	807.0	819.0	838.2	852.6	857.4
20°	786.6	798.6	822.6	839.4	845.4
22.5°	762.5	778.2	805.8	825.0	829.8
25°	737.3	755.3	785.4	807.0	814.2
27.5°	709.7	731.3	763.7	790.2	796.2
30°	680.9	703.7	740.9	769.7	776.9
32.5°	650.9	677.3	716.9	749.3	758.9
35°	620.8	647.3	690.5	726.5	737.3
37.5°	586.0	617.2	665.3	702.5	715.7
40°	556.0	586.0	637.7	678.5	691.7
42.5°	522.4	554.8	608.8	653.3	668.9
45°	488.7	523.6	581.2	628.0	643.7
47.5°	457.5	492.3	552.4	601.6	617.2
50°	425.1	461.1	523.6	574.0	589.6
52.5°	390.3	429.9	494.7	545.2	563.2
55°	359.1	398.7	463.5	516.4	534.4
57.5°	326.6	367.5	434.7	485.1	502.0
60°	296.6	336.2	402.3	451.5	470.7
62.5°	264.2	305.0	369.9	417.9	435.9
65°	234.2	273.8	337.4	384.3	401.1
67.5°	204.1	243.8	303.8	348.2	367.5
70°	174.1	213.8	269.0	312.2	329.0
72.5°	147.7	182.5	235.4	275.0	290.6
75°	118.9	153.7	198.1	233.0	240.2
77.5°	92.5	123.7	160.9	176.5	178.9
80°	68.4	92.5	117.7	121.3	121.3
82.5°	45.6	63.6	73.3	74.5	73.3
85°	27.6	33.6	34.8	30.0	27.6
87.5°	9.6	9.6	6.0	3.6	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)