

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: P387803

Luminaire Tested: **22CZ2-29HE-SQR-UNV-L950-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: P387803
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-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: 2561.8 lumens
Efficiency: N/A
Efficacy: 115.4 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

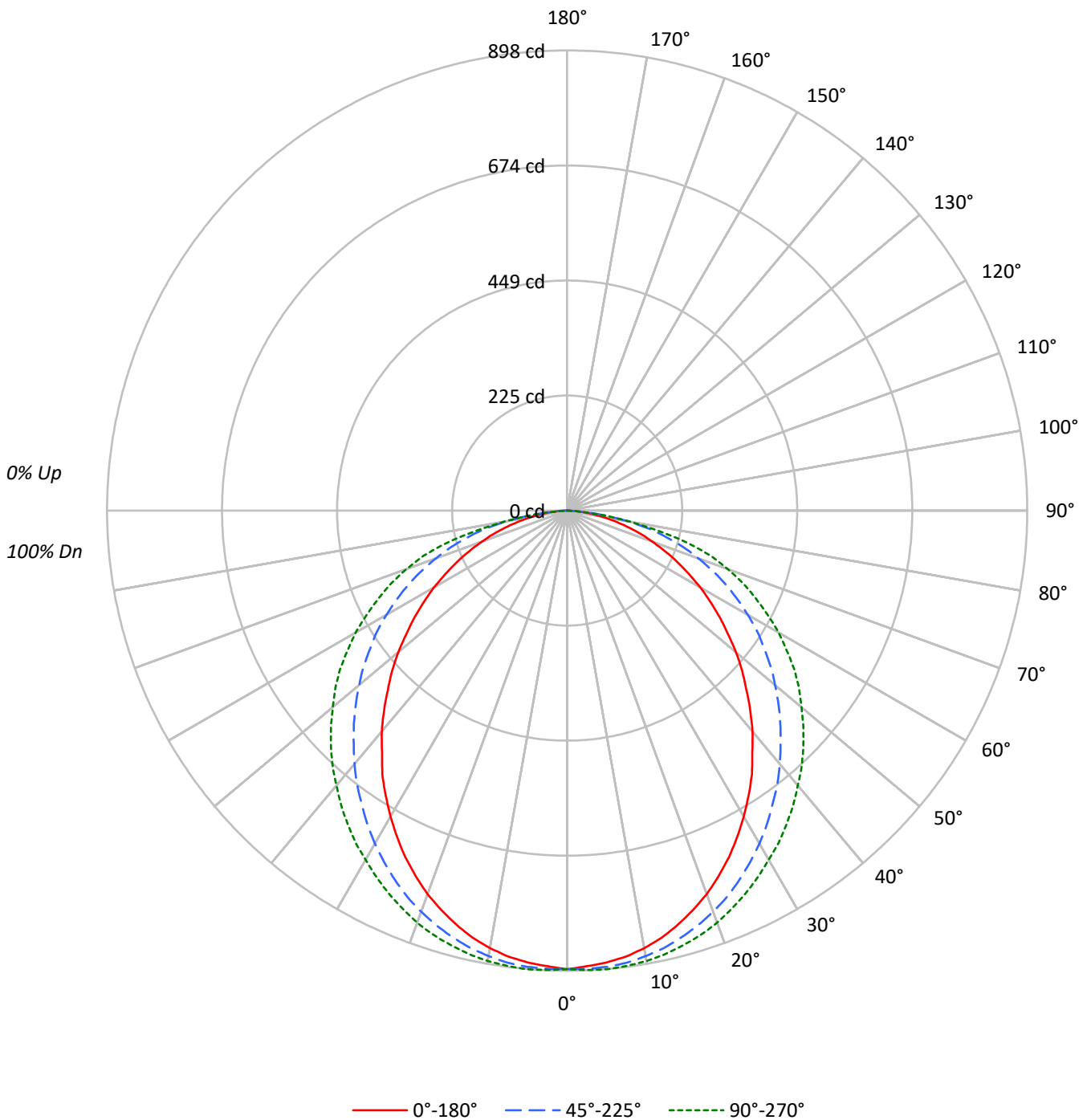
Input Watts (W): 22.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2408	2408	2408
5°	2391	2414	2427
10°	2369	2412	2439
15°	2330	2402	2446
20°	2281	2385	2451
25°	2217	2361	2448
30°	2142	2331	2444
35°	2065	2297	2453
40°	1978	2268	2460
45°	1883	2240	2480
50°	1802	2219	2499
55°	1706	2202	2539
60°	1616	2192	2565
65°	1510	2176	2586
70°	1387	2143	2622
75°	1252	2086	2529
80°	1074	1847	1903
85°	865	1090	865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.8	3.3
10°-20°	242.6	9.5
20°-30°	364.3	14.2
30°-40°	434.5	17.0
40°-50°	449.2	17.5
50°-60°	413.0	16.1
60°-70°	328.8	12.8
70°-80°	200.9	7.8
80°-90°	43.7	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°	691.7	27.0
0°-40°	1126.2	44.0
0°-60°	1988.5	77.6
0°-90°	2561.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2561.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	885	888	894	897	898	84
15°	836	846	862	874	878	236
25°	747	765	795	817	824	343
35°	629	655	699	736	747	392
45°	495	530	588	636	652	383
55°	364	404	469	523	541	325
65°	237	277	342	389	406	235
75°	120	156	201	236	243	128
85°	28	34	35	30	28	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	894.9	894.9	894.9	894.9	894.9
2.5°	890.0	891.3	894.9	897.3	897.3
5°	885.2	887.6	893.7	897.3	898.5
7.5°	877.9	881.5	890.0	894.9	896.1
10°	866.9	871.8	882.7	890.0	892.5
12.5°	853.6	860.9	874.2	884.0	886.4
15°	836.5	846.3	862.1	874.2	877.9
17.5°	817.1	829.2	848.7	863.3	868.1
20°	796.4	808.6	832.9	849.9	856.0
22.5°	772.1	787.9	815.9	835.3	840.2
25°	746.6	764.8	795.2	817.1	824.4
27.5°	718.6	740.5	773.3	800.1	806.1
30°	689.4	712.5	750.2	779.4	786.7
32.5°	659.0	685.8	725.9	758.7	768.4
35°	628.6	655.4	699.1	735.6	746.6
37.5°	593.4	625.0	673.6	711.3	724.7
40°	563.0	593.4	645.6	687.0	700.4
42.5°	528.9	561.7	616.5	661.4	677.3
45°	494.9	530.1	588.5	635.9	651.7
47.5°	463.3	498.5	559.3	609.2	625.0
50°	430.4	466.9	530.1	581.2	597.0
52.5°	395.2	435.3	500.9	552.0	570.3
55°	363.6	403.7	469.3	522.8	541.1
57.5°	330.7	372.1	440.2	491.2	508.2
60°	300.3	340.5	407.3	457.2	476.6
62.5°	267.5	308.8	374.5	423.1	441.4
65°	237.1	277.2	341.7	389.1	406.1
67.5°	206.7	246.8	307.6	352.6	372.1
70°	176.3	216.4	272.4	316.1	333.2
72.5°	149.6	184.8	238.3	278.4	294.2
75°	120.4	155.6	200.6	235.9	243.2
77.5°	93.6	125.2	162.9	178.7	181.2
80°	69.3	93.6	119.2	122.8	122.8
82.5°	46.2	64.4	74.2	75.4	74.2
85°	28.0	34.0	35.3	30.4	28.0
87.5°	9.7	9.7	6.1	3.6	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)