

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: P387827

Luminaire Tested: **22CZ2-29VHE-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: P387827
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: 22CZ2-29VHE-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: 2711.6 lumens
Efficiency: N/A
Efficacy: 125.0 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

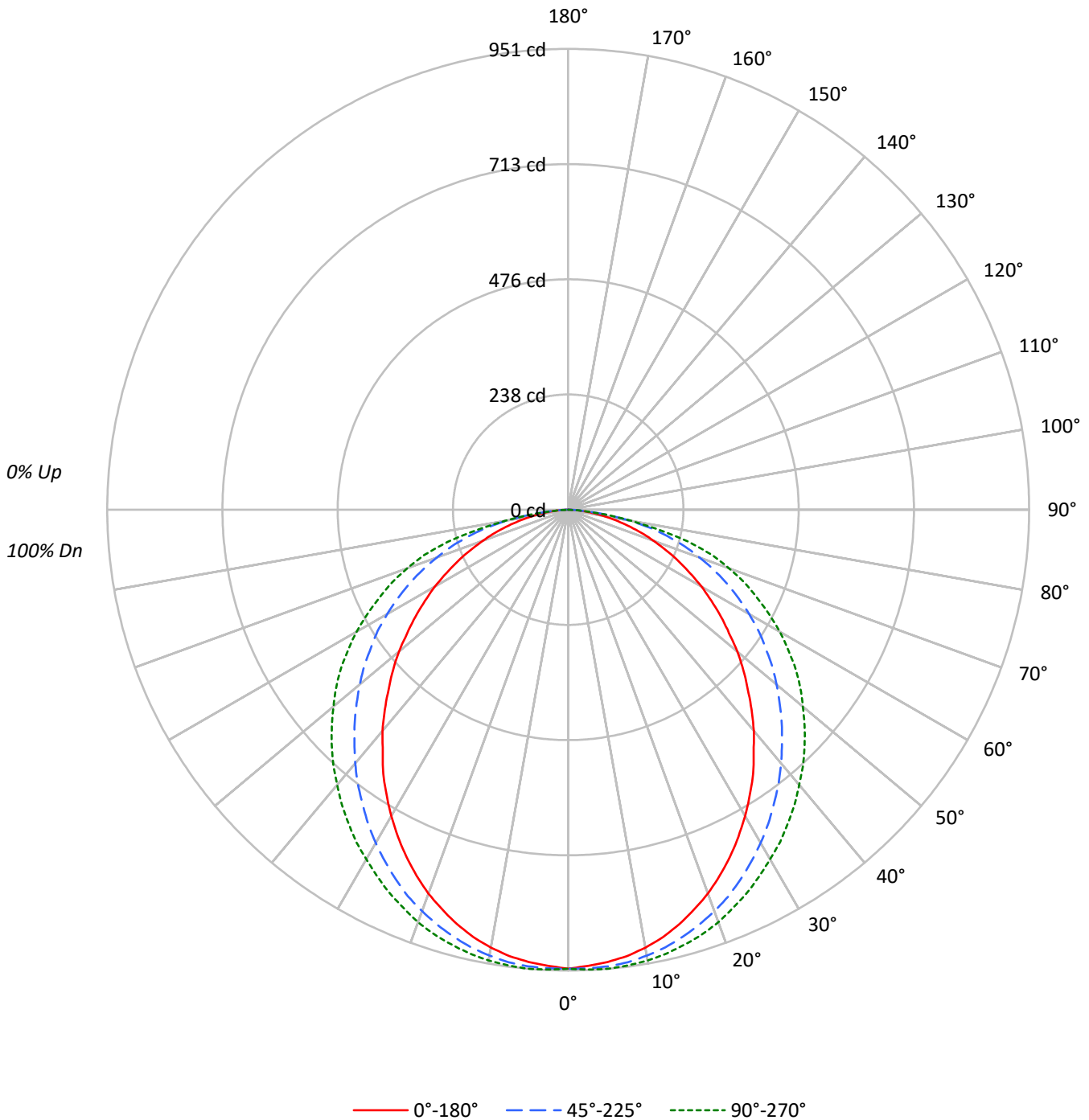
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2549	2549	2549
5°	2531	2555	2569
10°	2507	2553	2581
15°	2467	2542	2589
20°	2414	2525	2594
25°	2346	2499	2591
30°	2267	2467	2587
35°	2186	2431	2596
40°	2093	2401	2604
45°	1993	2371	2625
50°	1907	2349	2645
55°	1805	2331	2687
60°	1711	2320	2715
65°	1598	2302	2737
70°	1468	2268	2774
75°	1325	2208	2676
80°	1137	1954	2015
85°	914	1152	914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.8	3.3
10°-20°	256.7	9.5
20°-30°	385.6	14.2
30°-40°	459.9	17.0
40°-50°	475.5	17.5
50°-60°	437.2	16.1
60°-70°	348.0	12.8
70°-80°	212.6	7.8
80°-90°	46.2	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°	732.2	27.0
0°-40°	1192.1	44.0
0°-60°	2104.7	77.6
0°-90°	2711.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2711.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	937	940	946	950	951	89
15°	886	896	912	925	929	249
25°	790	810	842	865	873	363
35°	665	694	740	779	790	415
45°	524	561	623	673	690	405
55°	385	427	497	553	573	344
65°	251	293	362	412	430	249
75°	127	165	212	250	257	136
85°	30	36	37	32	30	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	947.2	947.2	947.2	947.2	947.2
2.5°	942.1	943.4	947.2	949.8	949.8
5°	936.9	939.5	945.9	949.8	951.1
7.5°	929.2	933.1	942.1	947.2	948.5
10°	917.6	922.8	934.4	942.1	944.7
12.5°	903.5	911.2	925.3	935.6	938.2
15°	885.5	895.7	912.5	925.3	929.2
17.5°	864.9	877.7	898.3	913.8	918.9
20°	843.0	855.9	881.6	899.6	906.0
22.5°	817.2	834.0	863.6	884.2	889.3
25°	790.2	809.5	841.7	864.9	872.6
27.5°	760.6	783.8	818.5	846.8	853.3
30°	729.7	754.2	794.1	825.0	832.7
32.5°	697.6	725.9	768.3	803.1	813.4
35°	665.4	693.7	740.0	778.6	790.2
37.5°	628.1	661.5	713.0	752.9	767.0
40°	595.9	628.1	683.4	727.2	741.3
42.5°	559.8	594.6	652.5	700.1	716.9
45°	523.8	561.1	622.9	673.1	689.8
47.5°	490.3	527.7	592.0	644.8	661.5
50°	455.6	494.2	561.1	615.2	631.9
52.5°	418.3	460.7	530.2	584.3	603.6
55°	384.8	427.3	496.8	553.4	572.7
57.5°	350.1	393.8	465.9	519.9	538.0
60°	317.9	360.4	431.1	483.9	504.5
62.5°	283.1	326.9	396.4	447.9	467.2
65°	251.0	293.4	361.6	411.8	429.9
67.5°	218.8	261.3	325.6	373.2	393.8
70°	186.6	229.1	288.3	334.6	352.6
72.5°	158.3	195.6	252.3	294.7	311.5
75°	127.4	164.7	212.4	249.7	257.4
77.5°	99.1	132.6	172.5	189.2	191.8
80°	73.4	99.1	126.1	130.0	130.0
82.5°	48.9	68.2	78.5	79.8	78.5
85°	29.6	36.0	37.3	32.2	29.6
87.5°	10.3	10.3	6.4	3.9	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)