

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: P387779

Luminaire Tested: **22CZ2-24VHE-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: P387779
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: 22CZ2-24VHE-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: 2177.8 lumens
Efficiency: N/A
Efficacy: 124.4 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

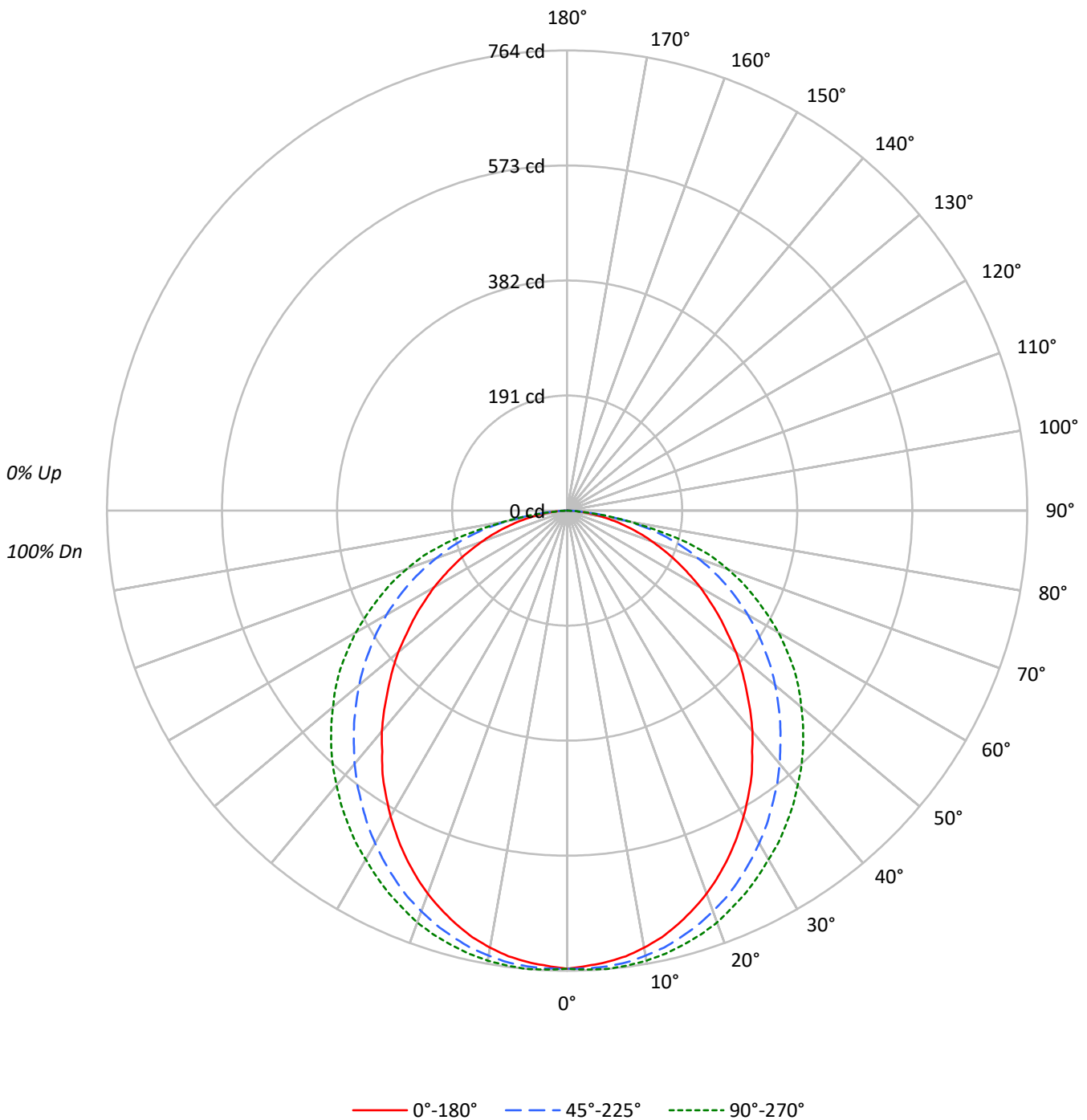
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2047	2047	2047
5°	2033	2052	2063
10°	2014	2050	2073
15°	1981	2042	2079
20°	1939	2027	2084
25°	1885	2007	2081
30°	1821	1982	2078
35°	1756	1952	2085
40°	1681	1928	2092
45°	1601	1904	2108
50°	1532	1887	2125
55°	1450	1872	2158
60°	1374	1864	2181
65°	1284	1850	2198
70°	1179	1821	2228
75°	1064	1774	2149
80°	913	1570	1618
85°	735	926	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	3.3
10°-20°	206.2	9.5
20°-30°	309.7	14.2
30°-40°	369.4	17.0
40°-50°	381.9	17.5
50°-60°	351.1	16.1
60°-70°	279.5	12.8
70°-80°	170.8	7.8
80°-90°	37.1	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°	588.0	27.0
0°-40°	957.4	44.0
0°-60°	1690.4	77.6
0°-90°	2177.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2177.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	752	755	760	763	764	71
15°	711	719	733	743	746	200
25°	635	650	676	695	701	292
35°	534	557	594	625	635	333
45°	421	451	500	541	554	325
55°	309	343	399	444	460	276
65°	202	236	290	331	345	200
75°	102	132	171	200	207	109
85°	24	29	30	26	24	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.8	760.8	760.8	760.8	760.8
2.5°	756.6	757.7	760.8	762.8	762.8
5°	752.5	754.6	759.7	762.8	763.9
7.5°	746.3	749.4	756.6	760.8	761.8
10°	737.0	741.1	750.4	756.6	758.7
12.5°	725.6	731.8	743.2	751.5	753.5
15°	711.1	719.4	732.8	743.2	746.3
17.5°	694.6	704.9	721.5	733.9	738.0
20°	677.0	687.4	708.0	722.5	727.7
22.5°	656.4	669.8	693.6	710.1	714.2
25°	634.7	650.2	676.0	694.6	700.8
27.5°	610.9	629.5	657.4	680.1	685.3
30°	586.1	605.7	637.8	662.6	668.8
32.5°	560.2	583.0	617.1	645.0	653.3
35°	534.4	557.1	594.3	625.4	634.7
37.5°	504.4	531.3	572.6	604.7	616.0
40°	478.6	504.4	548.9	584.0	595.4
42.5°	449.6	477.5	524.1	562.3	575.7
45°	420.7	450.7	500.3	540.6	554.0
47.5°	393.8	423.8	475.5	517.9	531.3
50°	365.9	396.9	450.7	494.1	507.5
52.5°	335.9	370.0	425.9	469.3	484.8
55°	309.1	343.2	399.0	444.5	460.0
57.5°	281.1	316.3	374.2	417.6	432.1
60°	255.3	289.4	346.3	388.6	405.2
62.5°	227.4	262.5	318.4	359.7	375.2
65°	201.6	235.7	290.5	330.8	345.2
67.5°	175.7	209.8	261.5	299.8	316.3
70°	149.9	184.0	231.5	268.7	283.2
72.5°	127.1	157.1	202.6	236.7	250.1
75°	102.3	132.3	170.6	200.5	206.7
77.5°	79.6	106.5	138.5	151.9	154.0
80°	58.9	79.6	101.3	104.4	104.4
82.5°	39.3	54.8	63.1	64.1	63.1
85°	23.8	28.9	30.0	25.8	23.8
87.5°	8.3	8.3	5.2	3.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)