

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: P387754

Luminaire Tested: **22CZ2-24HE-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: P387754
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: 22CZ2-24HE-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: 2077.7 lumens
Efficiency: N/A
Efficacy: 108.2 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

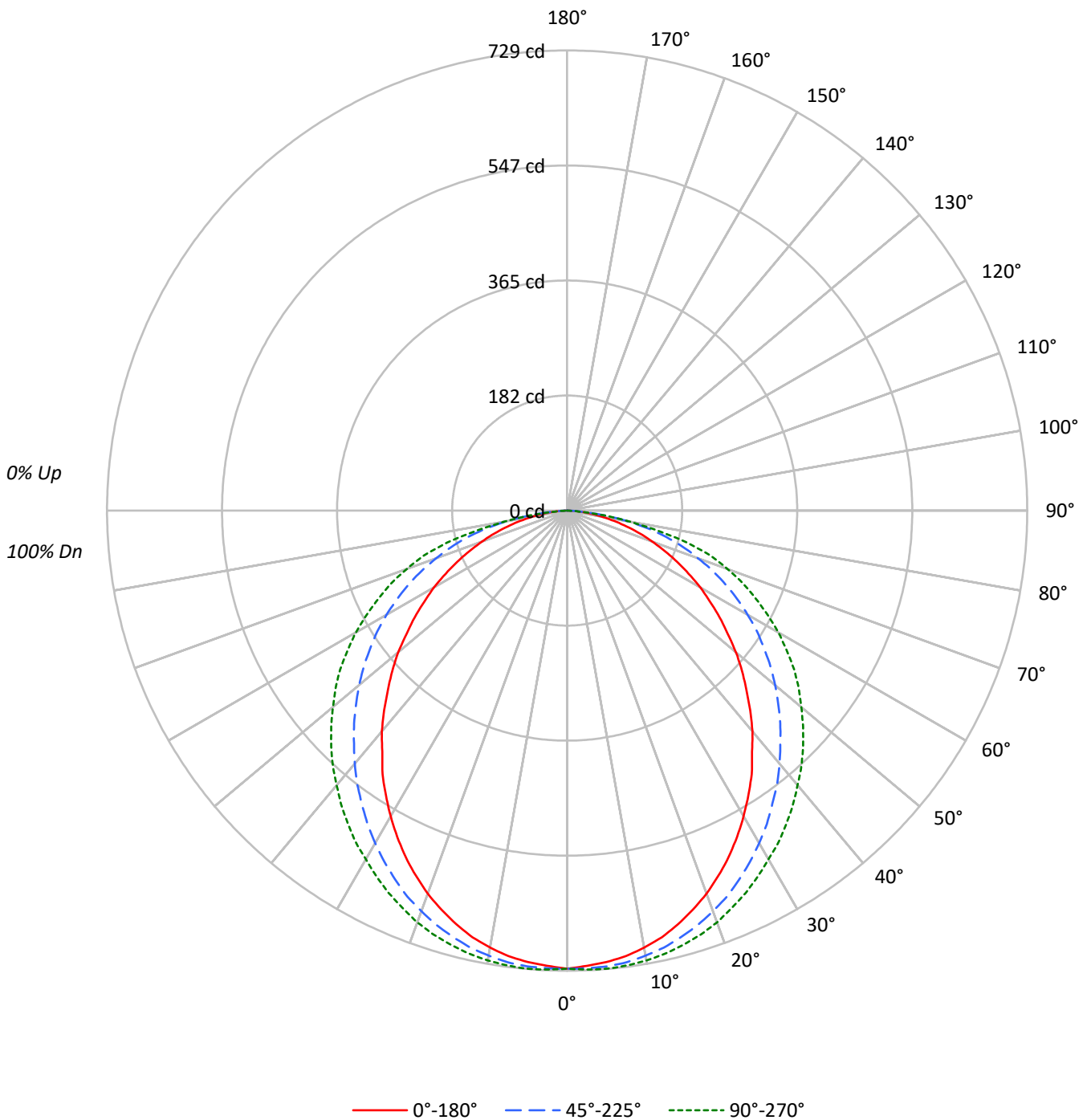
Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1953	1953	1953
5°	1939	1958	1968
10°	1921	1956	1978
15°	1890	1948	1984
20°	1850	1934	1988
25°	1798	1915	1985
30°	1737	1890	1982
35°	1675	1863	1989
40°	1604	1839	1995
45°	1528	1816	2012
50°	1461	1800	2027
55°	1384	1786	2059
60°	1311	1778	2081
65°	1224	1764	2097
70°	1125	1738	2126
75°	1015	1692	2050
80°	871	1497	1543
85°	701	883	701



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	3.3
10°-20°	196.7	9.5
20°-30°	295.5	14.2
30°-40°	352.4	17.0
40°-50°	364.4	17.5
50°-60°	335.0	16.1
60°-70°	266.7	12.8
70°-80°	162.9	7.8
80°-90°	35.4	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°	561.0	27.0
0°-40°	913.4	44.0
0°-60°	1612.7	77.6
0°-90°	2077.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2077.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	718	720	725	728	729	68
15°	678	686	699	709	712	191
25°	606	620	645	663	669	279
35°	510	532	567	597	606	318
45°	401	430	477	516	529	310
55°	295	327	381	424	439	264
65°	192	225	277	316	329	190
75°	98	126	163	191	197	104
85°	23	28	29	25	23	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	725.8	725.8	725.8	725.8	725.8
2.5°	721.8	722.8	725.8	727.8	727.8
5°	717.9	719.9	724.8	727.8	728.7
7.5°	712.0	714.9	721.8	725.8	726.8
10°	703.1	707.1	715.9	721.8	723.8
12.5°	692.3	698.2	709.0	716.9	718.9
15°	678.5	686.3	699.2	709.0	712.0
17.5°	662.7	672.5	688.3	700.2	704.1
20°	645.9	655.8	675.5	689.3	694.2
22.5°	626.2	639.0	661.7	677.5	681.4
25°	605.5	620.3	644.9	662.7	668.6
27.5°	582.8	600.6	627.2	648.9	653.8
30°	559.1	577.9	608.4	632.1	638.0
32.5°	534.5	556.2	588.7	615.3	623.2
35°	509.8	531.5	567.0	596.6	605.5
37.5°	481.2	506.9	546.3	576.9	587.7
40°	456.6	481.2	523.6	557.2	568.0
42.5°	429.0	455.6	500.0	536.5	549.3
45°	401.4	430.0	477.3	515.7	528.6
47.5°	375.7	404.3	453.6	494.1	506.9
50°	349.1	378.7	430.0	471.4	484.2
52.5°	320.5	353.0	406.3	447.7	462.5
55°	294.9	327.4	380.6	424.0	438.8
57.5°	268.2	301.8	357.0	398.4	412.2
60°	243.6	276.1	330.4	370.8	386.6
62.5°	216.9	250.5	303.7	343.2	358.0
65°	192.3	224.8	277.1	315.6	329.4
67.5°	167.6	200.2	249.5	286.0	301.8
70°	143.0	175.5	220.9	256.4	270.2
72.5°	121.3	149.9	193.3	225.8	238.6
75°	97.6	126.2	162.7	191.3	197.2
77.5°	75.9	101.6	132.1	145.0	146.9
80°	56.2	75.9	96.6	99.6	99.6
82.5°	37.5	52.3	60.2	61.1	60.2
85°	22.7	27.6	28.6	24.7	22.7
87.5°	7.9	7.9	4.9	3.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)