

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: P387753

Luminaire Tested: **22CZ2-24HE-SQR-UNV-L950-CD1-SDWPD1-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: P387753
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-SDWPD1-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: 2052.7 lumens
Efficiency: N/A
Efficacy: 106.9 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

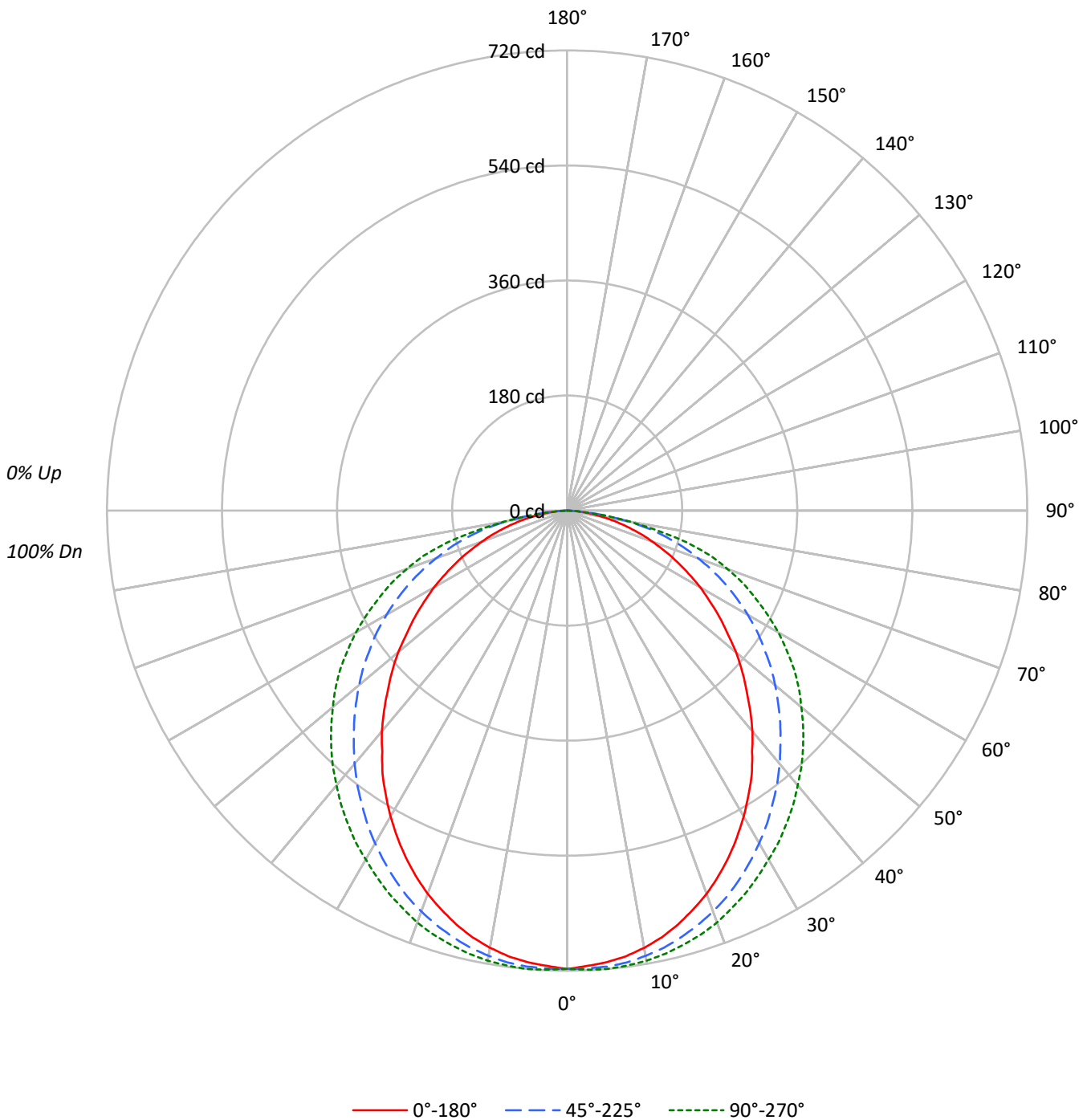
Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1930	1930	1930
5°	1916	1934	1945
10°	1898	1933	1954
15°	1867	1925	1960
20°	1827	1911	1964
25°	1776	1892	1961
30°	1716	1868	1959
35°	1655	1840	1965
40°	1585	1817	1971
45°	1509	1794	1987
50°	1444	1778	2003
55°	1367	1765	2034
60°	1295	1757	2055
65°	1210	1743	2072
70°	1112	1717	2100
75°	1003	1672	2026
80°	860	1480	1525
85°	692	874	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.3
10°-20°	194.4	9.5
20°-30°	291.9	14.2
30°-40°	348.1	17.0
40°-50°	360.0	17.5
50°-60°	330.9	16.1
60°-70°	263.5	12.8
70°-80°	161.0	7.8
80°-90°	35.0	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°	554.2	27.0
0°-40°	902.4	44.0
0°-60°	1593.3	77.6
0°-90°	2052.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2052.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	709	711	716	719	720	67
15°	670	678	691	700	703	189
25°	598	613	637	655	661	275
35°	504	525	560	589	598	314
45°	396	425	472	510	522	307
55°	291	324	376	419	434	261
65°	190	222	274	312	325	188
75°	96	125	161	189	195	103
85°	22	27	28	24	22	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	717.1	717.1	717.1	717.1	717.1
2.5°	713.2	714.1	717.1	719.0	719.0
5°	709.3	711.2	716.1	719.0	720.0
7.5°	703.4	706.3	713.2	717.1	718.0
10°	694.6	698.5	707.3	713.2	715.1
12.5°	683.9	689.8	700.5	708.3	710.2
15°	670.3	678.1	690.8	700.5	703.4
17.5°	654.7	664.4	680.0	691.7	695.6
20°	638.1	647.9	667.4	681.0	685.9
22.5°	618.7	631.3	653.7	669.3	673.2
25°	598.2	612.8	637.2	654.7	660.6
27.5°	575.8	593.3	619.6	641.1	645.9
30°	552.4	570.9	601.1	624.5	630.3
32.5°	528.1	549.5	581.6	607.9	615.7
35°	503.7	525.1	560.2	589.4	598.2
37.5°	475.4	500.8	539.7	569.9	580.7
40°	451.1	475.4	517.3	550.5	561.2
42.5°	423.8	450.1	494.0	530.0	542.7
45°	396.5	424.8	471.5	509.5	522.2
47.5°	371.2	399.4	448.2	488.1	500.8
50°	344.9	374.1	424.8	465.7	478.4
52.5°	316.6	348.8	401.4	442.3	456.9
55°	291.3	323.5	376.1	418.9	433.5
57.5°	265.0	298.1	352.7	393.6	407.2
60°	240.6	272.8	326.4	366.3	381.9
62.5°	214.3	247.5	300.1	339.0	353.7
65°	190.0	222.1	273.8	311.8	325.4
67.5°	165.6	197.8	246.5	282.5	298.1
70°	141.3	173.4	218.2	253.3	266.9
72.5°	119.8	148.1	191.0	223.1	235.8
75°	96.5	124.7	160.8	189.0	194.9
77.5°	75.0	100.3	130.6	143.2	145.2
80°	55.5	75.0	95.5	98.4	98.4
82.5°	37.0	51.6	59.4	60.4	59.4
85°	22.4	27.3	28.3	24.4	22.4
87.5°	7.8	7.8	4.9	2.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)