

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: P387682

Luminaire Tested: **22CZ2-20HE-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: P387682
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: 22CZ2-20HE-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: 1757.8 lumens
Efficiency: N/A
Efficacy: 109.9 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

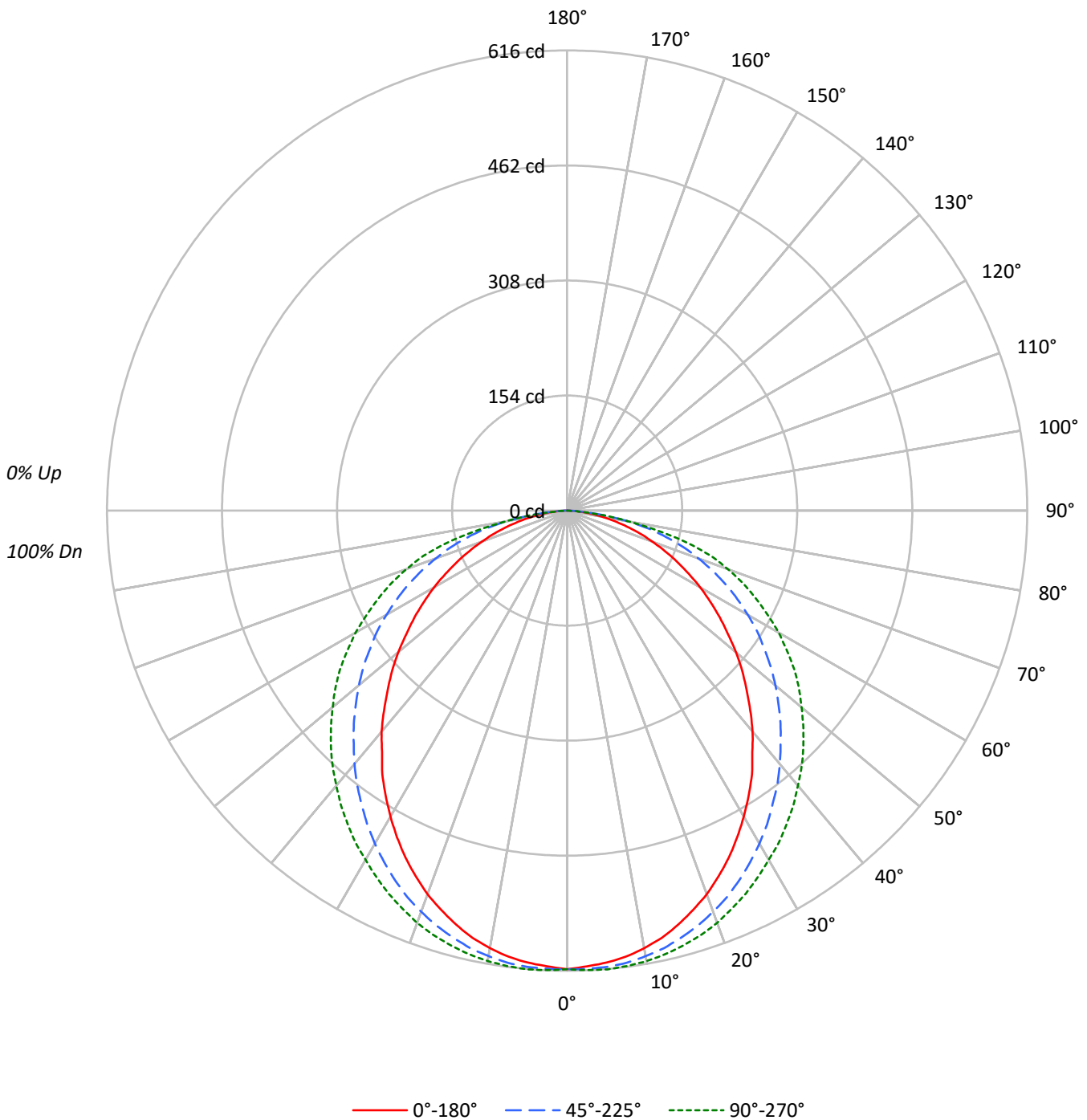
Input Watts (W): 16
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1652	1652	1652
5°	1641	1656	1665
10°	1626	1655	1673
15°	1599	1648	1678
20°	1565	1637	1682
25°	1521	1620	1680
30°	1470	1600	1677
35°	1417	1576	1683
40°	1357	1556	1688
45°	1292	1537	1702
50°	1236	1523	1715
55°	1171	1511	1742
60°	1109	1504	1760
65°	1036	1493	1775
70°	952	1471	1799
75°	859	1432	1735
80°	738	1268	1306
85°	593	747	593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.2	3.3
10°-20°	166.4	9.5
20°-30°	250.0	14.2
30°-40°	298.1	17.0
40°-50°	308.3	17.5
50°-60°	283.4	16.1
60°-70°	225.6	12.8
70°-80°	137.8	7.8
80°-90°	30.0	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°	474.6	27.0
0°-40°	772.8	44.0
0°-60°	1364.4	77.6
0°-90°	1757.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1757.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	607	609	613	616	616	58
15°	574	581	592	600	602	162
25°	512	525	546	561	566	236
35°	431	450	480	505	512	269
45°	340	364	404	436	447	263
55°	250	277	322	359	371	223
65°	163	190	234	267	279	161
75°	83	107	138	162	167	88
85°	19	23	24	21	19	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	614.0	614.0	614.0	614.0	614.0
2.5°	610.7	611.5	614.0	615.7	615.7
5°	607.4	609.0	613.2	615.7	616.5
7.5°	602.4	604.9	610.7	614.0	614.9
10°	594.9	598.2	605.7	610.7	612.4
12.5°	585.7	590.7	599.9	606.5	608.2
15°	574.0	580.7	591.5	599.9	602.4
17.5°	560.6	569.0	582.3	592.4	595.7
20°	546.5	554.8	571.5	583.2	587.3
22.5°	529.8	540.6	559.8	573.2	576.5
25°	512.3	524.8	545.6	560.6	565.7
27.5°	493.1	508.1	530.6	549.0	553.1
30°	473.0	488.9	514.8	534.8	539.8
32.5°	452.2	470.5	498.1	520.6	527.3
35°	431.3	449.7	479.7	504.7	512.3
37.5°	407.1	428.8	462.2	488.1	497.2
40°	386.3	407.1	443.0	471.4	480.6
42.5°	362.9	385.4	423.0	453.9	464.7
45°	339.6	363.8	403.8	436.3	447.2
47.5°	317.9	342.1	383.8	418.0	428.8
50°	295.3	320.4	363.8	398.8	409.6
52.5°	271.1	298.7	343.7	378.8	391.3
55°	249.5	277.0	322.0	358.7	371.3
57.5°	226.9	255.3	302.0	337.1	348.7
60°	206.1	233.6	279.5	313.7	327.0
62.5°	183.5	211.9	257.0	290.3	302.8
65°	162.7	190.2	234.4	267.0	278.7
67.5°	141.8	169.4	211.1	241.9	255.3
70°	121.0	148.5	186.9	216.9	228.6
72.5°	102.6	126.8	163.5	191.1	201.9
75°	82.6	106.8	137.7	161.9	166.9
77.5°	64.2	85.9	111.8	122.6	124.3
80°	47.6	64.2	81.8	84.3	84.3
82.5°	31.7	44.2	50.9	51.7	50.9
85°	19.2	23.4	24.2	20.9	19.2
87.5°	6.7	6.7	4.2	2.5	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)