

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: P390558

Luminaire Tested: **22CZ2-65VHE-HRP-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: P390558
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-HRP-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4925.3 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

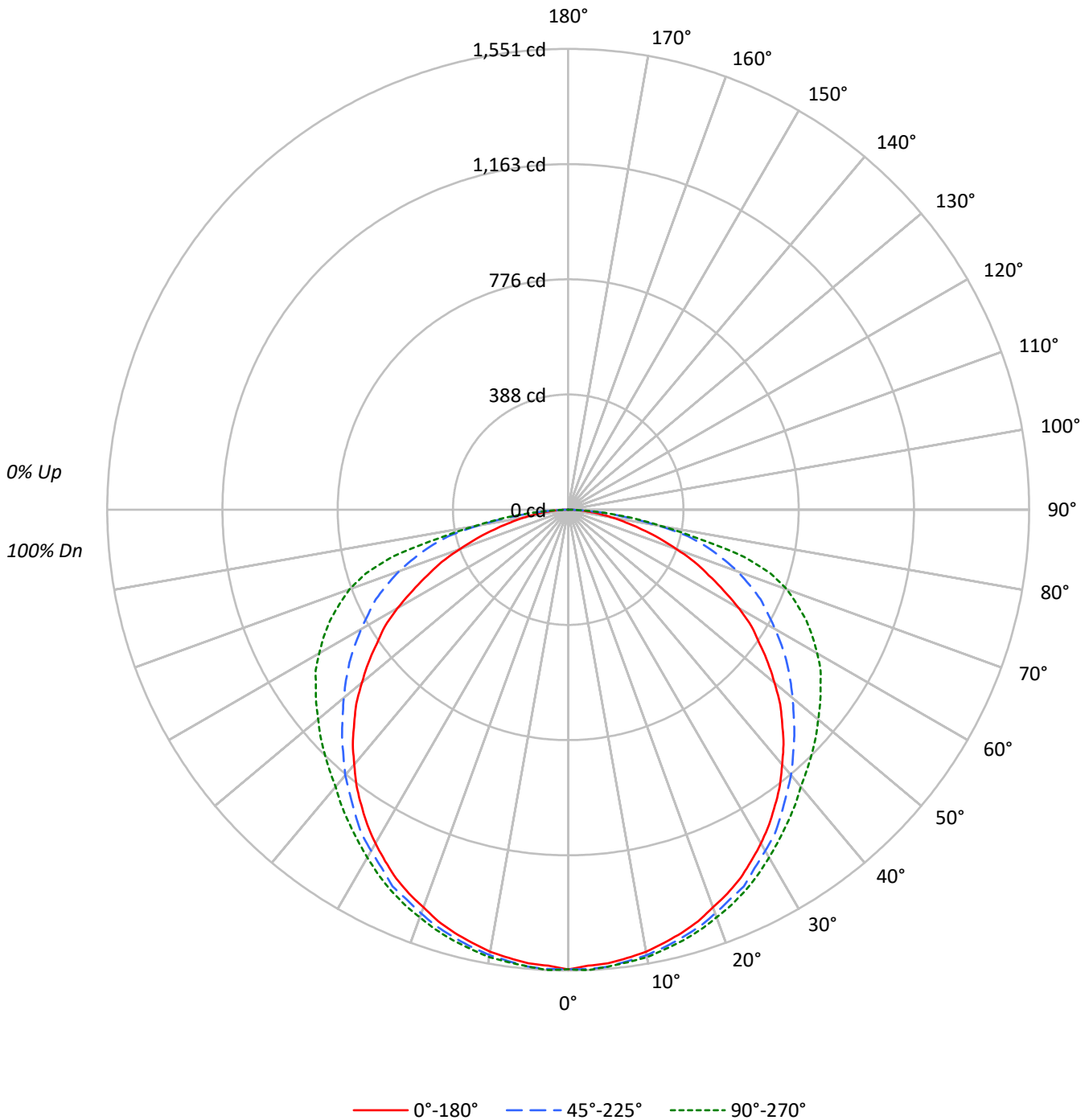
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4163	4163	4163
5°	4140	4169	4169
10°	4129	4158	4178
15°	4108	4149	4179
20°	4078	4140	4182
25°	4067	4153	4196
30°	4030	4121	4199
35°	3987	4106	4225
40°	3933	4098	4277
45°	3875	4095	4412
50°	3792	4126	4596
55°	3689	4216	4861
60°	3569	4329	5207
65°	3322	4545	5629
70°	3050	4761	6157
75°	2674	5010	6366
80°	2303	4773	4998
85°	2013	3467	3804



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	3.0
10°-20°	420.2	8.5
20°-30°	641.1	13.0
30°-40°	782.8	15.9
40°-50°	837.0	17.0
50°-60°	807.9	16.4
60°-70°	695.4	14.1
70°-80°	470.5	9.6
80°-90°	124.2	2.5
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°	1207.6	24.5
0°-40°	1990.4	40.4
0°-60°	3635.2	73.8
0°-90°	4925.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4925.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1547	1547	1547	1547	1547	
5°	1533	1536	1544	1544	1544	146
15°	1475	1478	1489	1496	1500	416
25°	1370	1377	1399	1406	1413	630
35°	1214	1225	1250	1275	1286	759
45°	1018	1036	1076	1130	1159	786
55°	786	812	899	989	1036	705
65°	522	572	714	826	884	519
75°	257	341	482	580	612	276
85°	65	91	112	116	123	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1547.1	1547.1	1547.1	1547.1	1547.1
2.5°	1536.3	1539.9	1547.1	1547.1	1550.7
5°	1532.6	1536.3	1543.5	1543.5	1543.5
7.5°	1521.8	1525.4	1532.6	1536.3	1536.3
10°	1510.9	1514.5	1521.8	1525.4	1529.0
12.5°	1492.8	1496.4	1507.3	1514.5	1514.5
15°	1474.7	1478.3	1489.2	1496.4	1500.0
17.5°	1452.9	1460.2	1471.0	1478.3	1481.9
20°	1423.9	1431.2	1445.7	1456.5	1460.2
22.5°	1398.6	1405.8	1420.3	1431.2	1438.4
25°	1369.6	1376.8	1398.6	1405.8	1413.1
27.5°	1333.4	1340.6	1358.7	1373.2	1384.1
30°	1297.1	1304.4	1326.1	1344.2	1351.5
32.5°	1257.3	1268.1	1293.5	1308.0	1318.9
35°	1213.8	1224.7	1250.0	1275.4	1286.2
37.5°	1170.3	1181.2	1206.5	1239.1	1253.6
40°	1119.6	1134.1	1166.7	1210.2	1217.4
42.5°	1072.5	1090.6	1119.6	1170.3	1188.4
45°	1018.1	1036.2	1076.1	1130.5	1159.4
47.5°	967.4	985.5	1029.0	1094.2	1130.5
50°	905.8	931.2	985.5	1061.6	1097.8
52.5°	847.8	869.6	942.0	1025.4	1068.9
55°	786.2	811.6	898.6	989.1	1036.2
57.5°	731.9	753.6	851.5	952.9	1007.3
60°	663.1	692.0	804.4	913.1	967.4
62.5°	590.6	634.1	757.3	869.6	927.5
65°	521.7	572.5	713.8	826.1	884.1
67.5°	460.2	514.5	659.4	779.0	833.3
70°	387.7	456.5	605.1	721.0	782.6
72.5°	322.5	398.6	543.5	659.4	713.8
75°	257.2	340.6	481.9	579.7	612.3
77.5°	199.3	279.0	413.0	442.0	445.7
80°	148.6	221.0	308.0	311.6	322.5
82.5°	101.5	155.8	199.3	217.4	221.0
85°	65.2	90.6	112.3	115.9	123.2
87.5°	29.0	32.6	39.9	36.2	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)