

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: P390559

Luminaire Tested: **22CZ2-65VHE-HRP-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: P390559
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-SWPD1-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: 4985.4 lumens
Efficiency: N/A
Efficacy: 104.1 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

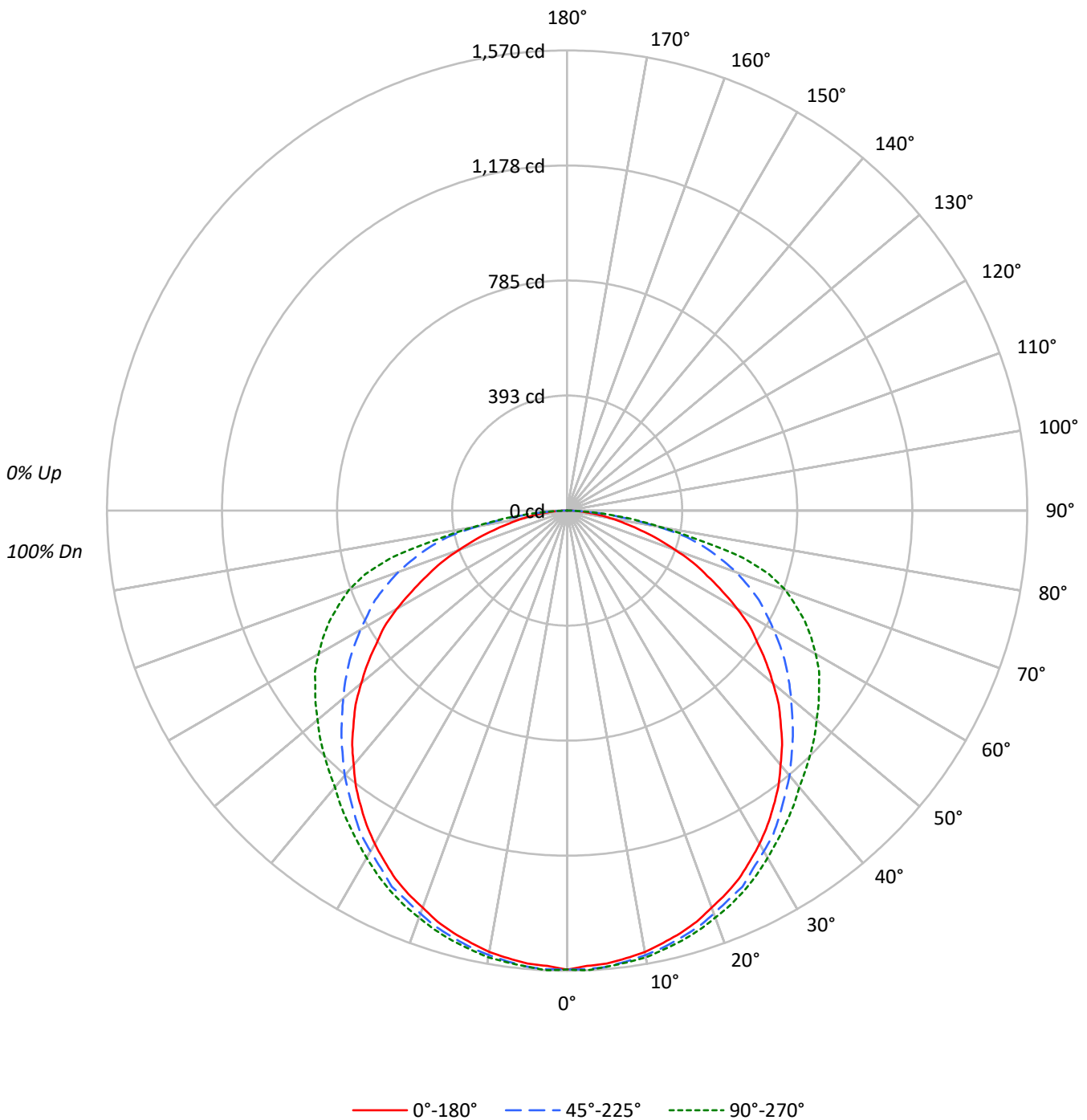
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4214	4214	4214
5°	4190	4220	4220
10°	4179	4209	4229
15°	4159	4199	4230
20°	4127	4190	4233
25°	4116	4203	4247
30°	4080	4171	4251
35°	4036	4157	4277
40°	3981	4148	4329
45°	3922	4145	4466
50°	3839	4176	4652
55°	3734	4267	4921
60°	3612	4382	5270
65°	3363	4600	5698
70°	3087	4819	6233
75°	2707	5072	6444
80°	2331	4830	5058
85°	2038	3511	3850



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	3.0
10°-20°	425.3	8.5
20°-30°	648.9	13.0
30°-40°	792.3	15.9
40°-50°	847.2	17.0
50°-60°	817.7	16.4
60°-70°	703.9	14.1
70°-80°	476.3	9.6
80°-90°	125.7	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°	1222.4	24.5
0°-40°	2014.7	40.4
0°-60°	3679.6	73.8
0°-90°	4985.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4985.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1551	1555	1562	1562	1562	147
15°	1493	1496	1507	1515	1518	421
25°	1386	1394	1416	1423	1430	638
35°	1229	1240	1265	1291	1302	769
45°	1031	1049	1089	1144	1174	795
55°	796	822	910	1001	1049	713
65°	528	580	722	836	895	525
75°	260	345	488	587	620	279
85°	66	92	114	117	125	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1566.0	1566.0	1566.0	1566.0	1566.0
2.5°	1555.0	1558.7	1566.0	1566.0	1569.7
5°	1551.3	1555.0	1562.3	1562.3	1562.3
7.5°	1540.3	1544.0	1551.3	1555.0	1555.0
10°	1529.3	1533.0	1540.3	1544.0	1547.7
12.5°	1511.0	1514.7	1525.7	1533.0	1533.0
15°	1492.7	1496.3	1507.3	1514.7	1518.3
17.5°	1470.6	1478.0	1489.0	1496.3	1500.0
20°	1441.3	1448.6	1463.3	1474.3	1478.0
22.5°	1415.6	1423.0	1437.6	1448.6	1456.0
25°	1386.3	1393.6	1415.6	1423.0	1430.3
27.5°	1349.6	1357.0	1375.3	1390.0	1401.0
30°	1312.9	1320.3	1342.3	1360.6	1368.0
32.5°	1272.6	1283.6	1309.3	1323.9	1335.0
35°	1228.6	1239.6	1265.3	1290.9	1301.9
37.5°	1184.6	1195.6	1221.3	1254.3	1268.9
40°	1133.2	1147.9	1180.9	1224.9	1232.3
42.5°	1085.6	1103.9	1133.2	1184.6	1202.9
45°	1030.6	1048.9	1089.2	1144.2	1173.6
47.5°	979.2	997.5	1041.6	1107.6	1144.2
50°	916.9	942.5	997.5	1074.6	1111.2
52.5°	858.2	880.2	953.5	1037.9	1081.9
55°	795.8	821.5	909.5	1001.2	1048.9
57.5°	740.8	762.8	861.9	964.5	1019.6
60°	671.1	700.5	814.2	924.2	979.2
62.5°	597.8	641.8	766.5	880.2	938.9
65°	528.1	579.5	722.5	836.2	894.9
67.5°	465.8	520.8	667.5	788.5	843.5
70°	392.4	462.1	612.5	729.8	792.2
72.5°	326.4	403.4	550.1	667.5	722.5
75°	260.4	344.7	487.8	586.8	619.8
77.5°	201.7	282.4	418.1	447.4	451.1
80°	150.4	223.7	311.7	315.4	326.4
82.5°	102.7	157.7	201.7	220.0	223.7
85°	66.0	91.7	113.7	117.4	124.7
87.5°	29.3	33.0	40.3	36.7	36.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)