

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: P390416

Luminaire Tested: **22CZ2-50VHE-HRP-UNV-L950-CD1-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: P390416
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: 22CZ2-50VHE-HRP-UNV-L950-CD1-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: 3921.3 lumens
Efficiency: N/A
Efficacy: 108.3 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

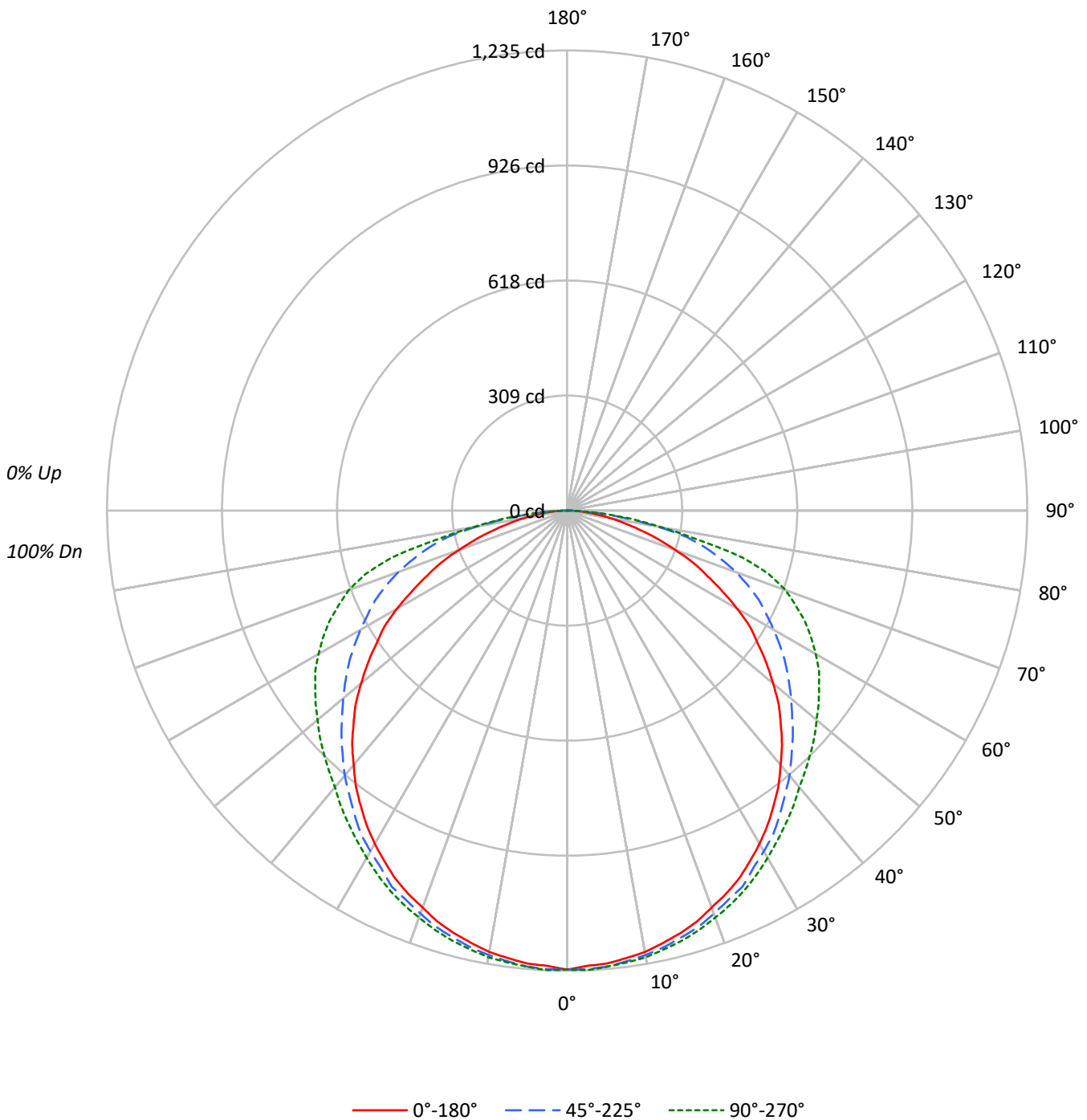
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3314	3314	3314
5°	3296	3320	3320
10°	3287	3311	3326
15°	3271	3303	3327
20°	3247	3296	3329
25°	3238	3306	3340
30°	3209	3281	3343
35°	3175	3269	3364
40°	3131	3263	3405
45°	3085	3260	3513
50°	3019	3285	3659
55°	2937	3356	3871
60°	2841	3447	4145
65°	2645	3619	4482
70°	2429	3790	4902
75°	2129	3989	5069
80°	1833	3800	3978
85°	1602	2760	3029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.0
10°-20°	334.5	8.5
20°-30°	510.4	13.0
30°-40°	623.2	15.9
40°-50°	666.4	17.0
50°-60°	643.2	16.4
60°-70°	553.7	14.1
70°-80°	374.6	9.6
80°-90°	98.8	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°	961.4	24.5
0°-40°	1584.7	40.4
0°-60°	2894.2	73.8
0°-90°	3921.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3921.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1220	1223	1229	1229	1229	116
15°	1174	1177	1186	1191	1194	331
25°	1090	1096	1114	1119	1125	502
35°	966	975	995	1015	1024	605
45°	811	825	857	900	923	626
55°	626	646	715	788	825	561
65°	415	456	568	658	704	413
75°	205	271	384	462	488	220
85°	52	72	89	92	98	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.7	1231.7	1231.7	1231.7	1231.7
2.5°	1223.1	1226.0	1231.7	1231.7	1234.6
5°	1220.2	1223.1	1228.9	1228.9	1228.9
7.5°	1211.6	1214.4	1220.2	1223.1	1223.1
10°	1202.9	1205.8	1211.6	1214.4	1217.3
12.5°	1188.5	1191.4	1200.0	1205.8	1205.8
15°	1174.1	1176.9	1185.6	1191.4	1194.2
17.5°	1156.7	1162.5	1171.2	1176.9	1179.8
20°	1133.7	1139.4	1151.0	1159.6	1162.5
22.5°	1113.5	1119.2	1130.8	1139.4	1145.2
25°	1090.4	1096.2	1113.5	1119.2	1125.0
27.5°	1061.6	1067.3	1081.7	1093.3	1101.9
30°	1032.7	1038.5	1055.8	1070.2	1076.0
32.5°	1001.0	1009.6	1029.8	1041.4	1050.0
35°	966.4	975.0	995.2	1015.4	1024.1
37.5°	931.7	940.4	960.6	986.6	998.1
40°	891.4	902.9	928.9	963.5	969.2
42.5°	853.9	868.3	891.4	931.7	946.2
45°	810.6	825.0	856.7	900.0	923.1
47.5°	770.2	784.6	819.2	871.2	900.0
50°	721.2	741.4	784.6	845.2	874.1
52.5°	675.0	692.3	750.0	816.4	851.0
55°	626.0	646.2	715.4	787.5	825.0
57.5°	582.7	600.0	677.9	758.7	801.9
60°	527.9	551.0	640.4	726.9	770.2
62.5°	470.2	504.8	602.9	692.3	738.5
65°	415.4	455.8	568.3	657.7	703.9
67.5°	366.4	409.6	525.0	620.2	663.5
70°	308.7	363.5	481.7	574.0	623.1
72.5°	256.7	317.3	432.7	525.0	568.3
75°	204.8	271.2	383.7	461.5	487.5
77.5°	158.7	222.1	328.9	351.9	354.8
80°	118.3	176.0	245.2	248.1	256.7
82.5°	80.8	124.0	158.7	173.1	176.0
85°	51.9	72.1	89.4	92.3	98.1
87.5°	23.1	26.0	31.7	28.8	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)