

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: P390453

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L930-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: P390453
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: 22CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3778.7 lumens
Efficiency: N/A
Efficacy: 95.9 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

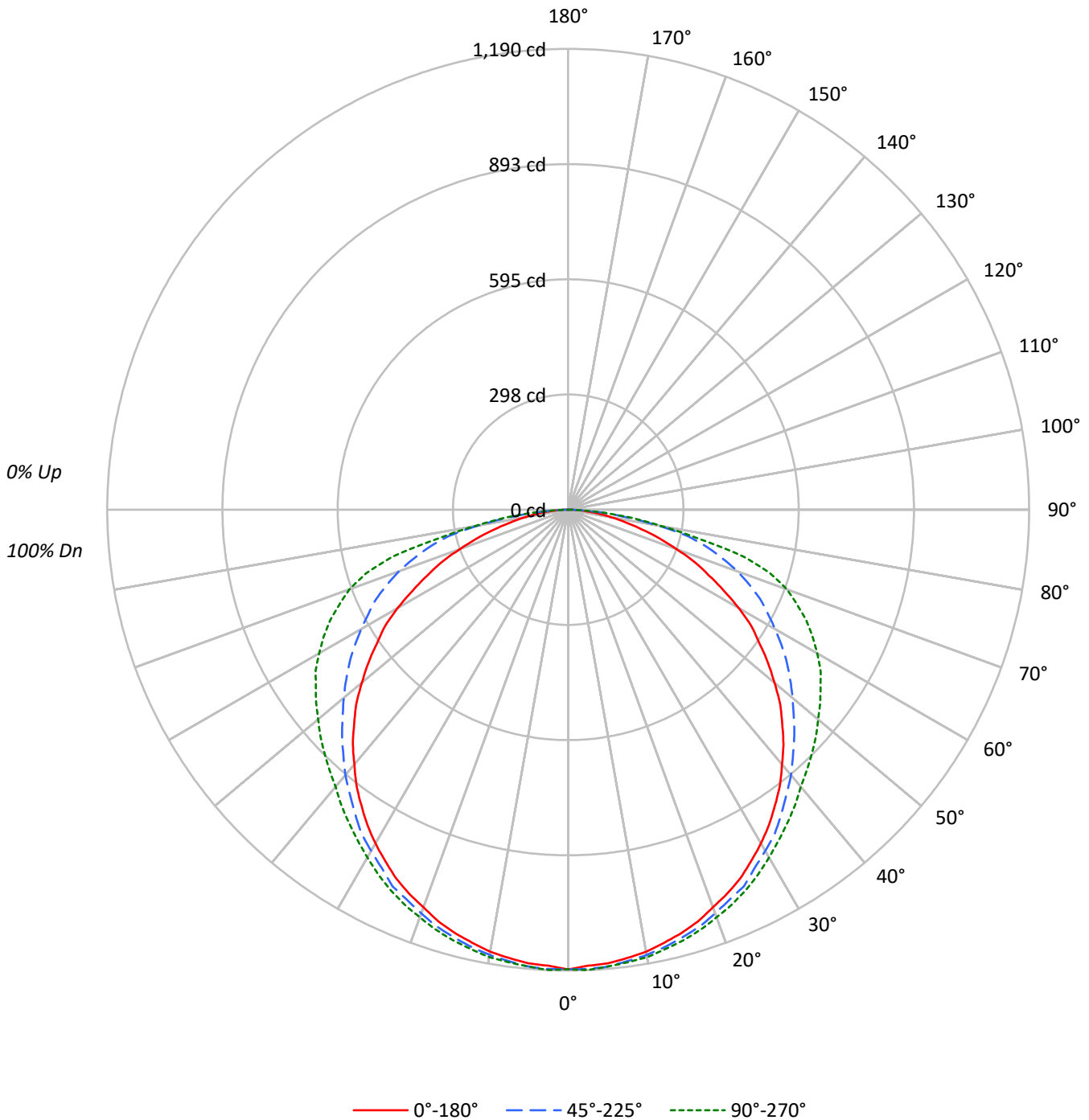
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390453

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390453

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

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°	3194	3194	3194
5°	3176	3199	3199
10°	3168	3190	3205
15°	3152	3183	3206
20°	3128	3176	3208
25°	3120	3186	3219
30°	3092	3161	3222
35°	3059	3150	3242
40°	3017	3144	3281
45°	2973	3142	3385
50°	2909	3165	3526
55°	2830	3234	3730
60°	2738	3321	3994
65°	2549	3487	4319
70°	2340	3652	4724
75°	2052	3844	4885
80°	1767	3662	3834
85°	1544	2661	2918



TEST NUMBER: P390453

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.0
10°-20°	322.4	8.5
20°-30°	491.8	13.0
30°-40°	600.6	15.9
40°-50°	642.1	17.0
50°-60°	619.8	16.4
60°-70°	533.5	14.1
70°-80°	361.0	9.6
80°-90°	95.3	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°	926.5	24.5
0°-40°	1527.0	40.4
0°-60°	2789.0	73.8
0°-90°	3778.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3778.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1176	1179	1184	1184	1184	112
15°	1131	1134	1142	1148	1151	319
25°	1051	1056	1073	1078	1084	484
35°	931	940	959	978	987	583
45°	781	795	826	867	890	603
55°	603	623	689	759	795	541
65°	400	439	548	634	678	398
75°	197	261	370	445	470	212
85°	50	70	86	89	94	56
90°	0	0	0	0	0	



TEST NUMBER: P390453

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1178.6	1181.4	1187.0	1187.0	1189.7
5°	1175.8	1178.6	1184.2	1184.2	1184.2
7.5°	1167.5	1170.3	1175.8	1178.6	1178.6
10°	1159.2	1161.9	1167.5	1170.3	1173.1
12.5°	1145.3	1148.0	1156.4	1161.9	1161.9
15°	1131.4	1134.1	1142.5	1148.0	1150.8
17.5°	1114.7	1120.2	1128.6	1134.1	1136.9
20°	1092.4	1098.0	1109.1	1117.5	1120.2
22.5°	1073.0	1078.5	1089.7	1098.0	1103.6
25°	1050.7	1056.3	1073.0	1078.5	1084.1
27.5°	1022.9	1028.5	1042.4	1053.5	1061.9
30°	995.2	1000.7	1017.4	1031.3	1036.8
32.5°	964.6	972.9	992.4	1003.5	1011.8
35°	931.2	939.6	959.0	978.5	986.8
37.5°	897.9	906.2	925.7	950.7	961.8
40°	858.9	870.1	895.1	928.4	934.0
42.5°	822.8	836.7	858.9	897.9	911.8
45°	781.1	795.0	825.6	867.3	889.5
47.5°	742.2	756.1	789.5	839.5	867.3
50°	694.9	714.4	756.1	814.5	842.3
52.5°	650.5	667.1	722.7	786.7	820.0
55°	603.2	622.7	689.4	758.9	795.0
57.5°	561.5	578.2	653.2	731.1	772.8
60°	508.7	530.9	617.1	700.5	742.2
62.5°	453.1	486.5	581.0	667.1	711.6
65°	400.3	439.2	547.6	633.8	678.3
67.5°	353.0	394.7	505.9	597.6	639.3
70°	297.4	350.2	464.2	553.2	600.4
72.5°	247.4	305.8	417.0	505.9	547.6
75°	197.4	261.3	369.7	444.8	469.8
77.5°	152.9	214.0	316.9	339.1	341.9
80°	114.0	169.6	236.3	239.1	247.4
82.5°	77.8	119.5	152.9	166.8	169.6
85°	50.0	69.5	86.2	89.0	94.5
87.5°	22.2	25.0	30.6	27.8	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)