

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: P390456

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L935-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: P390456
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3872.2 lumens
Efficiency: N/A
Efficacy: 98.3 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

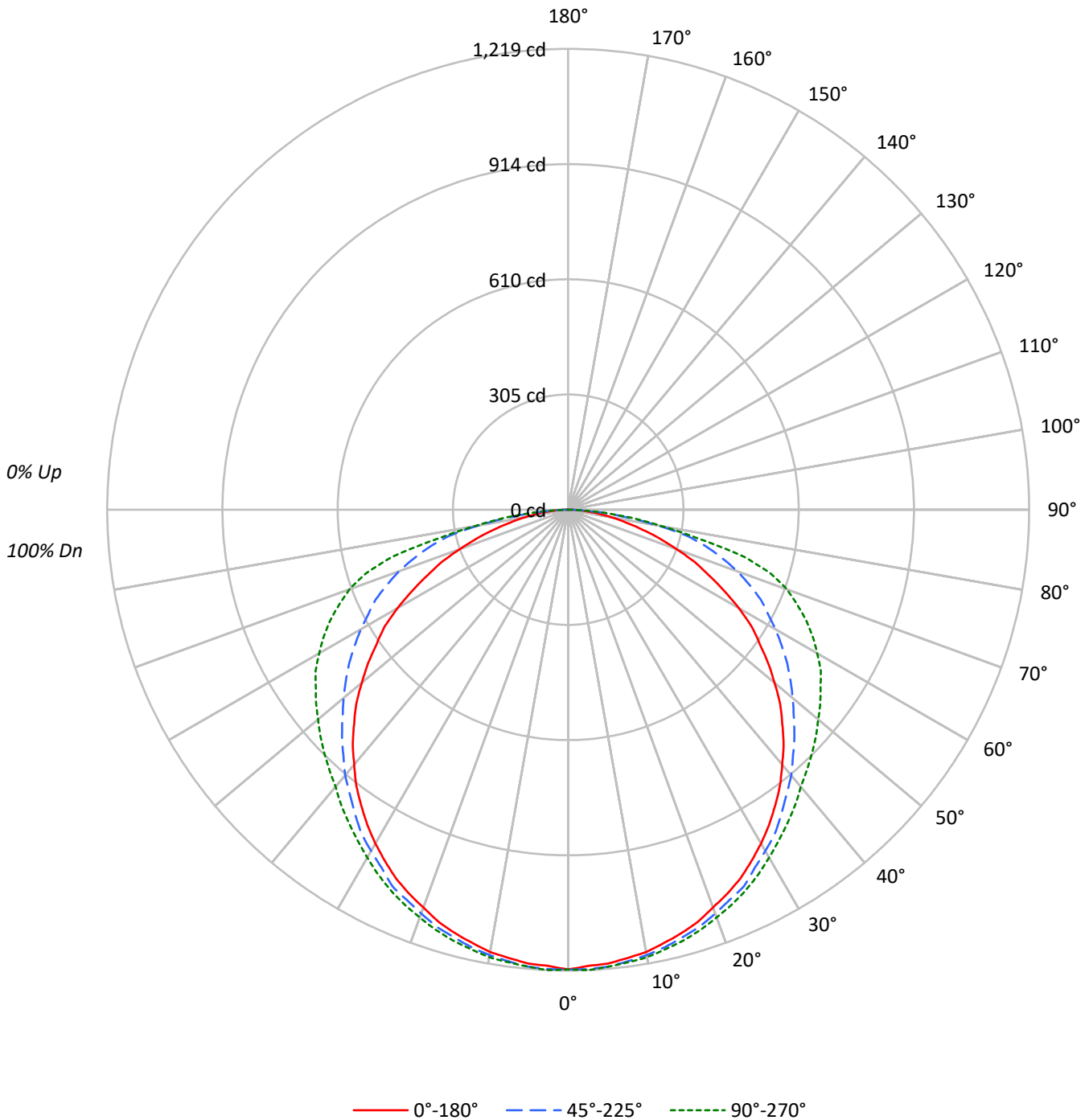
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390456

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L935-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390456

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L935-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°	3273	3273	3273
5°	3255	3278	3278
10°	3246	3269	3285
15°	3230	3261	3285
20°	3206	3255	3288
25°	3197	3265	3298
30°	3169	3240	3301
35°	3135	3228	3322
40°	3092	3222	3362
45°	3046	3220	3469
50°	2981	3244	3613
55°	2900	3314	3822
60°	2806	3404	4094
65°	2612	3573	4425
70°	2398	3743	4841
75°	2102	3939	5005
80°	1810	3752	3928
85°	1584	2726	2992



TEST NUMBER: P390456

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L935-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.1	3.0
10°-20°	330.4	8.5
20°-30°	504.0	13.0
30°-40°	615.4	15.9
40°-50°	658.0	17.0
50°-60°	635.1	16.4
60°-70°	546.7	14.1
70°-80°	369.9	9.6
80°-90°	97.6	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°	949.4	24.5
0°-40°	1564.8	40.4
0°-60°	2857.9	73.8
0°-90°	3872.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3872.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1205	1208	1214	1214	1214	114
15°	1159	1162	1171	1176	1179	327
25°	1077	1082	1100	1105	1111	496
35°	954	963	983	1003	1011	597
45°	800	815	846	889	912	618
55°	618	638	706	778	815	554
65°	410	450	561	650	695	408
75°	202	268	379	456	481	217
85°	51	71	88	91	97	58
90°	0	0	0	0	0	



TEST NUMBER: P390456

CATALOG NUMBER: 22CZ2-55VHE-HRP-UNV-L935-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.3	1216.3	1216.3	1216.3	1216.3
2.5°	1207.8	1210.6	1216.3	1216.3	1219.2
5°	1204.9	1207.8	1213.5	1213.5	1213.5
7.5°	1196.4	1199.2	1204.9	1207.8	1207.8
10°	1187.8	1190.7	1196.4	1199.2	1202.1
12.5°	1173.6	1176.4	1185.0	1190.7	1190.7
15°	1159.4	1162.2	1170.7	1176.4	1179.3
17.5°	1142.3	1148.0	1156.5	1162.2	1165.1
20°	1119.5	1125.2	1136.6	1145.1	1148.0
22.5°	1099.5	1105.2	1116.6	1125.2	1130.9
25°	1076.7	1082.4	1099.5	1105.2	1110.9
27.5°	1048.3	1054.0	1068.2	1079.6	1088.1
30°	1019.8	1025.5	1042.6	1056.8	1062.5
32.5°	988.4	997.0	1016.9	1028.3	1036.9
35°	954.3	962.8	982.7	1002.7	1011.2
37.5°	920.1	928.6	948.6	974.2	985.6
40°	880.2	891.6	917.2	951.4	957.1
42.5°	843.2	857.4	880.2	920.1	934.3
45°	800.4	814.7	846.0	888.7	911.5
47.5°	760.6	774.8	809.0	860.3	888.7
50°	712.1	732.1	774.8	834.6	863.1
52.5°	666.6	683.6	740.6	806.1	840.3
55°	618.1	638.1	706.4	777.7	814.7
57.5°	575.4	592.5	669.4	749.2	791.9
60°	521.3	544.1	632.4	717.8	760.6
62.5°	464.3	498.5	595.3	683.6	729.2
65°	410.2	450.1	561.2	649.5	695.0
67.5°	361.8	404.5	518.4	612.4	655.2
70°	304.8	358.9	475.7	566.9	615.3
72.5°	253.5	313.3	427.3	518.4	561.2
75°	202.2	267.8	378.9	455.8	481.4
77.5°	156.7	219.3	324.7	347.5	350.4
80°	116.8	173.8	242.1	245.0	253.5
82.5°	79.8	122.5	156.7	170.9	173.8
85°	51.3	71.2	88.3	91.2	96.9
87.5°	22.8	25.6	31.3	28.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)