

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: P390455

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L930-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: P390455
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-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: 3872.9 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

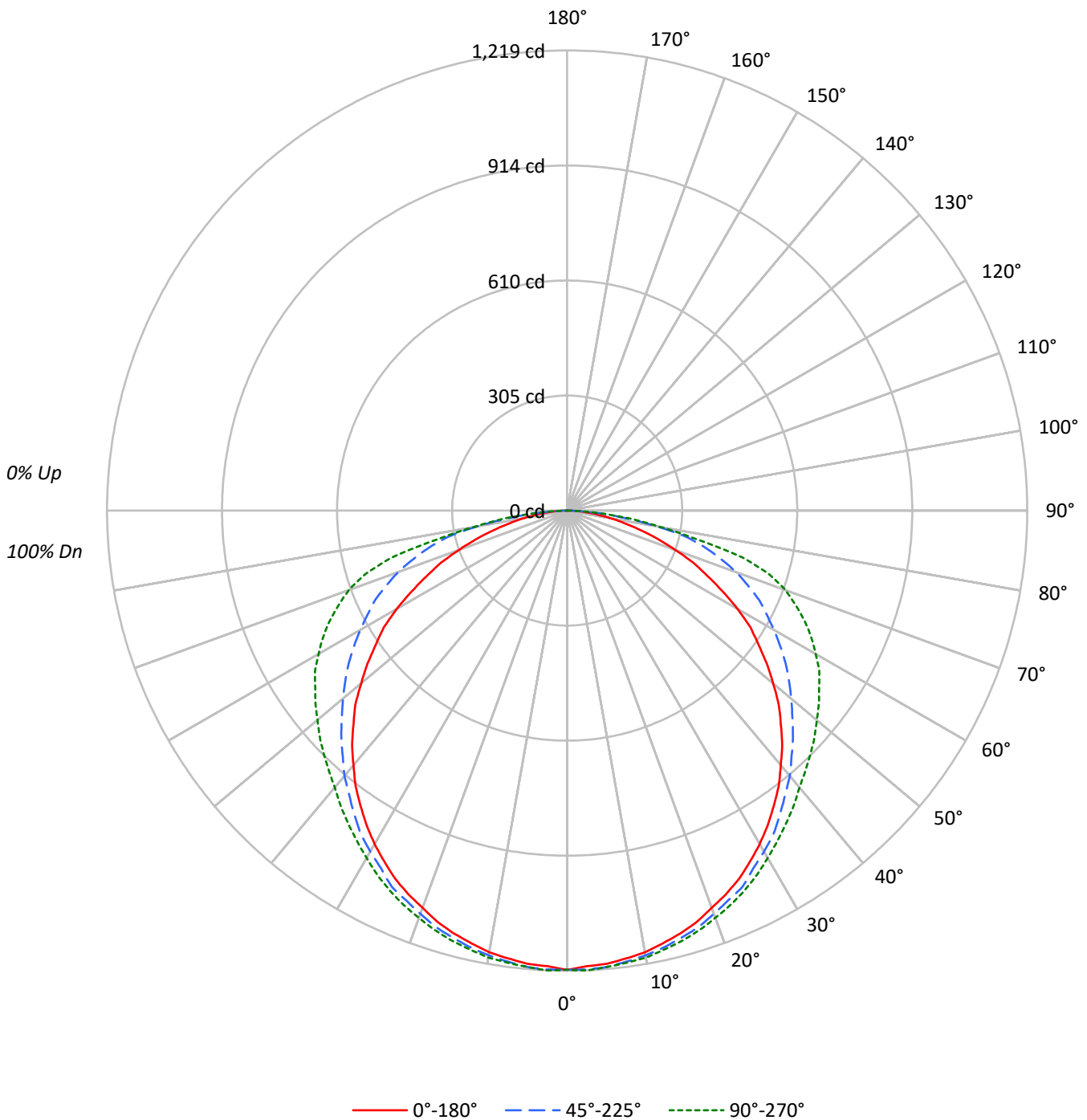
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3274	3274	3274
5°	3255	3279	3279
10°	3246	3270	3285
15°	3231	3262	3286
20°	3206	3255	3288
25°	3197	3265	3299
30°	3169	3240	3302
35°	3135	3229	3323
40°	3093	3223	3363
45°	3047	3220	3470
50°	2982	3244	3614
55°	2900	3315	3823
60°	2806	3404	4094
65°	2613	3574	4427
70°	2398	3744	4842
75°	2103	3939	5006
80°	1810	3753	3930
85°	1584	2726	2992



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.1	3.0
10°-20°	330.4	8.5
20°-30°	504.1	13.0
30°-40°	615.5	15.9
40°-50°	658.1	17.0
50°-60°	635.2	16.4
60°-70°	546.8	14.1
70°-80°	370.0	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°	949.6	24.5
0°-40°	1565.1	40.4
0°-60°	2858.5	73.8
0°-90°	3872.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3872.9	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°	1160	1162	1171	1177	1180	327
25°	1077	1083	1100	1105	1111	496
35°	954	963	983	1003	1011	597
45°	801	815	846	889	912	618
55°	618	638	707	778	815	554
65°	410	450	561	650	695	408
75°	202	268	379	456	482	217
85°	51	71	88	91	97	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.5	1216.5	1216.5	1216.5	1216.5
2.5°	1208.0	1210.8	1216.5	1216.5	1219.4
5°	1205.1	1208.0	1213.7	1213.7	1213.7
7.5°	1196.6	1199.5	1205.1	1208.0	1208.0
10°	1188.1	1190.9	1196.6	1199.5	1202.3
12.5°	1173.8	1176.7	1185.2	1190.9	1190.9
15°	1159.6	1162.4	1171.0	1176.7	1179.5
17.5°	1142.5	1148.2	1156.7	1162.4	1165.3
20°	1119.7	1125.4	1136.8	1145.3	1148.2
22.5°	1099.7	1105.4	1116.8	1125.4	1131.1
25°	1076.9	1082.6	1099.7	1105.4	1111.1
27.5°	1048.5	1054.1	1068.4	1079.8	1088.3
30°	1020.0	1025.7	1042.8	1057.0	1062.7
32.5°	988.6	997.2	1017.1	1028.5	1037.1
35°	954.4	963.0	982.9	1002.9	1011.4
37.5°	920.2	928.8	948.7	974.4	985.8
40°	880.4	891.8	917.4	951.6	957.3
42.5°	843.3	857.6	880.4	920.2	934.5
45°	800.6	814.8	846.2	888.9	911.7
47.5°	760.7	774.9	809.1	860.4	888.9
50°	712.3	732.2	774.9	834.8	863.3
52.5°	666.7	683.8	740.8	806.3	840.5
55°	618.2	638.2	706.6	777.8	814.8
57.5°	575.5	592.6	669.5	749.3	792.0
60°	521.4	544.2	632.5	718.0	760.7
62.5°	464.4	498.6	595.5	683.8	729.4
65°	410.3	450.2	561.3	649.6	695.2
67.5°	361.8	404.6	518.5	612.5	655.3
70°	304.8	359.0	475.8	567.0	615.4
72.5°	253.6	313.4	427.4	518.5	561.3
75°	202.3	267.8	378.9	455.8	481.5
77.5°	156.7	219.4	324.8	347.6	350.4
80°	116.8	173.8	242.2	245.0	253.6
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)