

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: P390454

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L930-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: P390454
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-SWPD1-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: 3824.9 lumens
Efficiency: N/A
Efficacy: 97.1 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

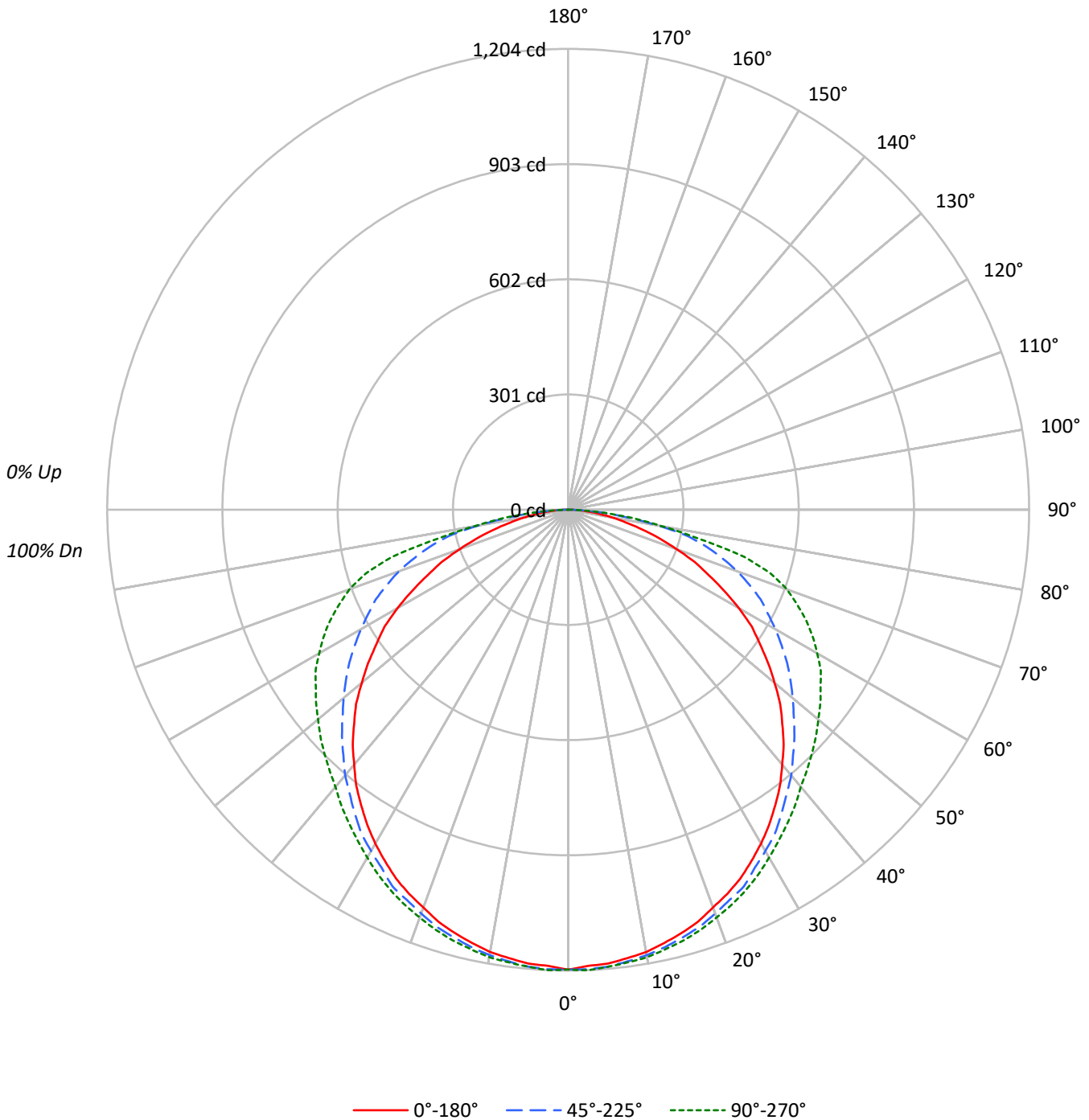
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3233	3233	3233
5°	3215	3238	3238
10°	3206	3229	3245
15°	3190	3222	3245
20°	3167	3215	3247
25°	3158	3225	3258
30°	3130	3200	3261
35°	3097	3189	3281
40°	3054	3183	3321
45°	3009	3180	3427
50°	2945	3204	3569
55°	2865	3274	3775
60°	2771	3362	4043
65°	2580	3529	4372
70°	2369	3697	4782
75°	2077	3891	4944
80°	1788	3707	3880
85°	1562	2692	2955



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.7	3.0
10°-20°	326.3	8.5
20°-30°	497.8	13.0
30°-40°	607.9	15.9
40°-50°	650.0	17.0
50°-60°	627.4	16.4
60°-70°	540.1	14.1
70°-80°	365.4	9.6
80°-90°	96.4	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°	937.8	24.5
0°-40°	1545.7	40.4
0°-60°	2823.0	73.8
0°-90°	3824.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3824.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1190	1193	1199	1199	1199	113
15°	1145	1148	1156	1162	1165	323
25°	1064	1069	1086	1092	1097	489
35°	943	951	971	990	999	590
45°	791	805	836	878	900	610
55°	611	630	698	768	805	547
65°	405	445	554	642	687	403
75°	200	264	374	450	476	214
85°	51	70	87	90	96	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.5	1201.5	1201.5	1201.5	1201.5
2.5°	1193.0	1195.8	1201.5	1201.5	1204.3
5°	1190.2	1193.0	1198.7	1198.7	1198.7
7.5°	1181.8	1184.6	1190.2	1193.0	1193.0
10°	1173.3	1176.1	1181.8	1184.6	1187.4
12.5°	1159.3	1162.1	1170.5	1176.1	1176.1
15°	1145.2	1148.0	1156.4	1162.1	1164.9
17.5°	1128.3	1133.9	1142.4	1148.0	1150.8
20°	1105.8	1111.4	1122.7	1131.1	1133.9
22.5°	1086.1	1091.7	1103.0	1111.4	1117.1
25°	1063.6	1069.2	1086.1	1091.7	1097.4
27.5°	1035.5	1041.1	1055.2	1066.4	1074.8
30°	1007.3	1012.9	1029.8	1043.9	1049.5
32.5°	976.4	984.8	1004.5	1015.8	1024.2
35°	942.6	951.0	970.7	990.4	998.9
37.5°	908.8	917.3	937.0	962.3	973.6
40°	869.4	880.7	906.0	939.8	945.4
42.5°	832.9	846.9	869.4	908.8	922.9
45°	790.7	804.7	835.7	877.9	900.4
47.5°	751.3	765.3	799.1	849.7	877.9
50°	703.4	723.1	765.3	824.4	852.6
52.5°	658.4	675.3	731.6	796.3	830.1
55°	610.6	630.3	697.8	768.2	804.7
57.5°	568.4	585.3	661.2	740.0	782.2
60°	514.9	537.4	624.7	709.1	751.3
62.5°	458.6	492.4	588.1	675.3	720.3
65°	405.2	444.6	554.3	641.5	686.6
67.5°	357.3	399.6	512.1	605.0	647.2
70°	301.1	354.5	469.9	559.9	607.8
72.5°	250.4	309.5	422.1	512.1	554.3
75°	199.8	264.5	374.2	450.2	475.5
77.5°	154.8	216.7	320.8	343.3	346.1
80°	115.4	171.6	239.2	242.0	250.4
82.5°	78.8	121.0	154.8	168.8	171.6
85°	50.6	70.3	87.2	90.0	95.7
87.5°	22.5	25.3	31.0	28.1	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)