

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: P390459

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L940-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: P390459
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3912.3 lumens
Efficiency: N/A
Efficacy: 99.3 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

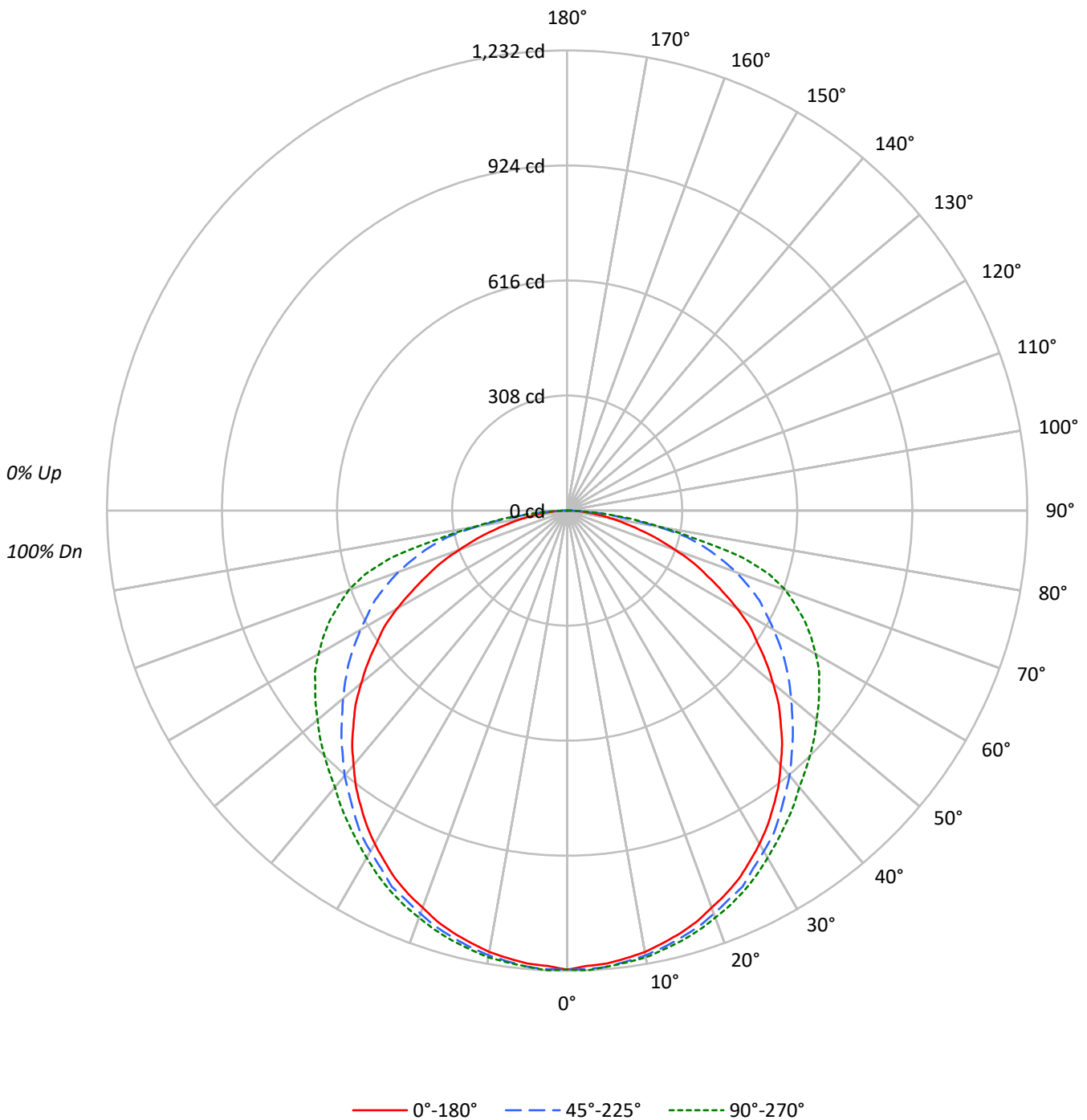
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3307	3307	3307
5°	3289	3312	3312
10°	3279	3303	3319
15°	3263	3295	3319
20°	3239	3288	3321
25°	3230	3298	3333
30°	3201	3273	3336
35°	3167	3262	3356
40°	3124	3255	3397
45°	3078	3253	3505
50°	3012	3277	3651
55°	2930	3349	3862
60°	2835	3439	4135
65°	2639	3610	4471
70°	2423	3781	4891
75°	2124	3980	5057
80°	1829	3790	3969
85°	1599	2754	3023



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.0
10°-20°	333.8	8.5
20°-30°	509.2	13.0
30°-40°	621.8	15.9
40°-50°	664.8	17.0
50°-60°	641.7	16.4
60°-70°	552.4	14.1
70°-80°	373.7	9.6
80°-90°	98.6	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°	959.2	24.5
0°-40°	1581.0	40.4
0°-60°	2887.6	73.8
0°-90°	3912.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3912.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1229	1229	1229	1229	1229	
5°	1217	1220	1226	1226	1226	116
15°	1171	1174	1183	1189	1192	330
25°	1088	1094	1111	1117	1122	501
35°	964	973	993	1013	1022	603
45°	809	823	855	898	921	624
55°	624	645	714	786	823	560
65°	414	455	567	656	702	412
75°	204	270	383	460	486	219
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°	1228.9	1228.9	1228.9	1228.9	1228.9
2.5°	1220.3	1223.2	1228.9	1228.9	1231.8
5°	1217.4	1220.3	1226.0	1226.0	1226.0
7.5°	1208.8	1211.7	1217.4	1220.3	1220.3
10°	1200.1	1203.0	1208.8	1211.7	1214.5
12.5°	1185.8	1188.6	1197.3	1203.0	1203.0
15°	1171.4	1174.2	1182.9	1188.6	1191.5
17.5°	1154.1	1159.8	1168.5	1174.2	1177.1
20°	1131.1	1136.8	1148.3	1157.0	1159.8
22.5°	1110.9	1116.7	1128.2	1136.8	1142.6
25°	1087.9	1093.7	1110.9	1116.7	1122.4
27.5°	1059.1	1064.9	1079.3	1090.8	1099.4
30°	1030.3	1036.1	1053.4	1067.8	1073.5
32.5°	998.7	1007.3	1027.5	1039.0	1047.6
35°	964.1	972.8	992.9	1013.1	1021.7
37.5°	929.6	938.2	958.4	984.3	995.8
40°	889.3	900.8	926.7	961.3	967.0
42.5°	851.9	866.3	889.3	929.6	944.0
45°	808.7	823.1	854.8	897.9	921.0
47.5°	768.4	782.8	817.4	869.2	897.9
50°	719.5	739.7	782.8	843.3	872.0
52.5°	673.5	690.7	748.3	814.5	849.0
55°	624.5	644.7	713.8	785.7	823.1
57.5°	581.4	598.6	676.3	756.9	800.1
60°	526.7	549.7	638.9	725.3	768.4
62.5°	469.1	503.7	601.5	690.7	736.8
65°	414.4	454.7	567.0	656.2	702.2
67.5°	365.5	408.7	523.8	618.8	661.9
70°	307.9	362.6	480.6	572.7	621.7
72.5°	256.1	316.6	431.7	523.8	567.0
75°	204.3	270.5	382.8	460.5	486.4
77.5°	158.3	221.6	328.1	351.1	354.0
80°	118.0	175.6	244.6	247.5	256.1
82.5°	80.6	123.8	158.3	172.7	175.6
85°	51.8	72.0	89.2	92.1	97.9
87.5°	23.0	25.9	31.7	28.8	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)