

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: P390457

Luminaire Tested: **22CZ2-55VHE-HRP-UNV-L935-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: P390457
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-SWPD1-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: 3919.5 lumens
Efficiency: N/A
Efficacy: 99.5 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

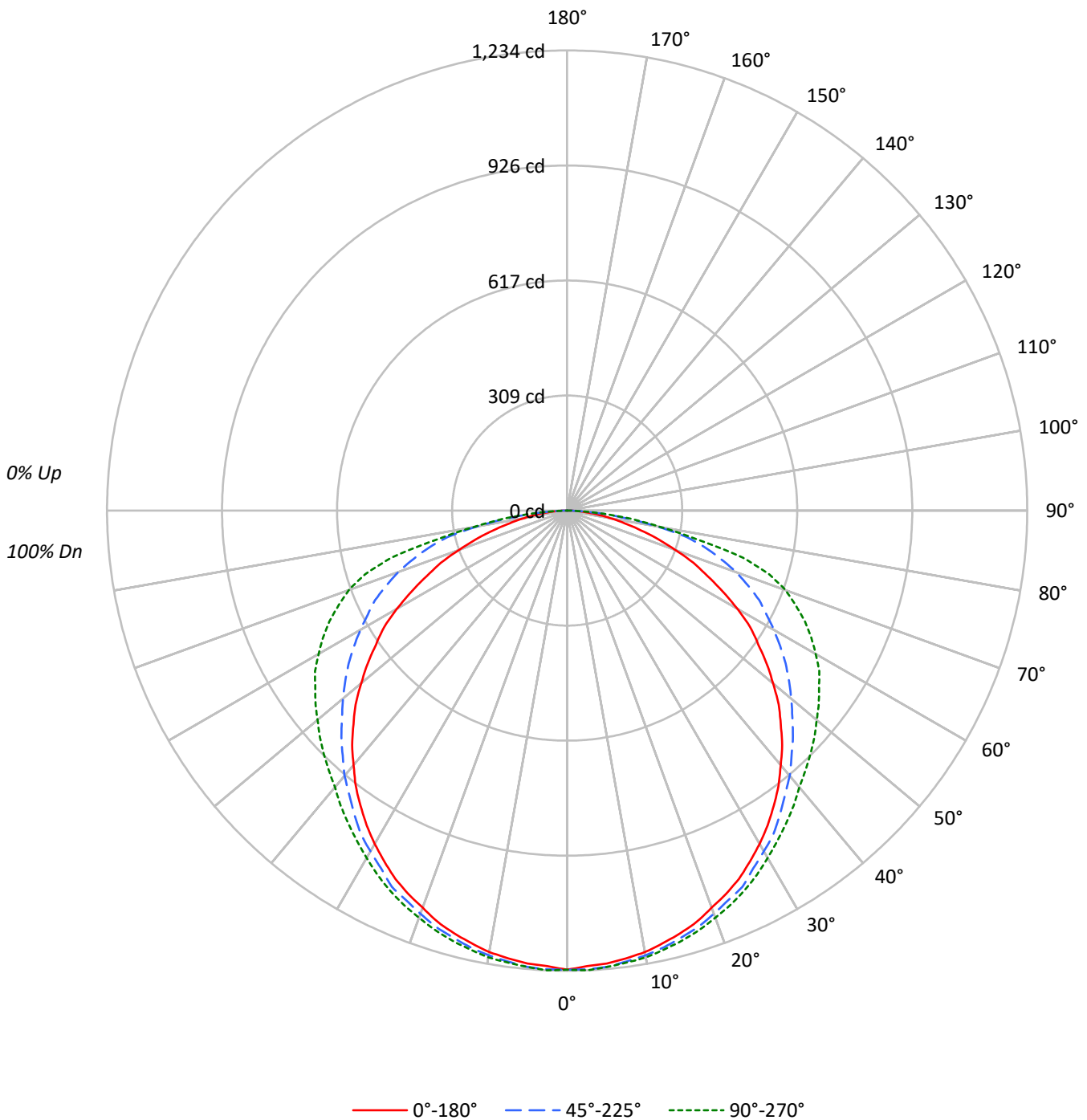
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3313	3313	3313
5°	3294	3318	3318
10°	3285	3309	3325
15°	3269	3301	3326
20°	3245	3294	3328
25°	3236	3305	3339
30°	3207	3279	3342
35°	3173	3268	3363
40°	3130	3261	3403
45°	3083	3259	3511
50°	3018	3283	3657
55°	2936	3355	3869
60°	2840	3445	4143
65°	2644	3617	4479
70°	2427	3788	4900
75°	2128	3987	5067
80°	1832	3798	3976
85°	1602	2760	3026



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.0
10°-20°	334.4	8.5
20°-30°	510.2	13.0
30°-40°	622.9	15.9
40°-50°	666.0	17.0
50°-60°	642.9	16.4
60°-70°	553.4	14.1
70°-80°	374.4	9.6
80°-90°	98.8	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°	961.0	24.5
0°-40°	1583.9	40.4
0°-60°	2892.8	73.8
0°-90°	3919.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3919.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1220	1222	1228	1228	1228	116
15°	1174	1176	1185	1191	1194	331
25°	1090	1096	1113	1119	1124	502
35°	966	975	995	1015	1024	604
45°	810	825	856	900	923	625
55°	626	646	715	787	825	561
65°	415	456	568	657	704	413
75°	205	271	384	461	487	220
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°	1231.2	1231.2	1231.2	1231.2	1231.2
2.5°	1222.5	1225.4	1231.2	1231.2	1234.1
5°	1219.6	1222.5	1228.3	1228.3	1228.3
7.5°	1211.0	1213.9	1219.6	1222.5	1222.5
10°	1202.3	1205.2	1211.0	1213.9	1216.8
12.5°	1187.9	1190.8	1199.5	1205.2	1205.2
15°	1173.5	1176.4	1185.0	1190.8	1193.7
17.5°	1156.2	1162.0	1170.6	1176.4	1179.3
20°	1133.1	1138.9	1150.4	1159.1	1162.0
22.5°	1113.0	1118.7	1130.3	1138.9	1144.7
25°	1089.9	1095.7	1113.0	1118.7	1124.5
27.5°	1061.1	1066.8	1081.2	1092.8	1101.4
30°	1032.2	1038.0	1055.3	1069.7	1075.5
32.5°	1000.5	1009.2	1029.3	1040.9	1049.5
35°	965.9	974.6	994.7	1014.9	1023.6
37.5°	931.3	940.0	960.1	986.1	997.6
40°	890.9	902.5	928.4	963.0	968.8
42.5°	853.5	867.9	890.9	931.3	945.7
45°	810.2	824.6	856.3	899.6	922.7
47.5°	769.8	784.3	818.9	870.8	899.6
50°	720.8	741.0	784.3	844.8	873.6
52.5°	674.7	692.0	749.7	816.0	850.6
55°	625.7	645.9	715.1	787.1	824.6
57.5°	582.4	599.7	677.6	758.3	801.6
60°	527.6	550.7	640.1	726.6	769.8
62.5°	470.0	504.6	602.6	692.0	738.1
65°	415.2	455.6	568.0	657.4	703.5
67.5°	366.2	409.4	524.8	619.9	663.2
70°	308.5	363.3	481.5	573.8	622.8
72.5°	256.6	317.2	432.5	524.8	568.0
75°	204.7	271.0	383.5	461.3	487.3
77.5°	158.6	222.0	328.7	351.8	354.6
80°	118.2	175.9	245.1	248.0	256.6
82.5°	80.7	124.0	158.6	173.0	175.9
85°	51.9	72.1	89.4	92.3	98.0
87.5°	23.1	25.9	31.7	28.8	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)