

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: P390389

Luminaire Tested: **22CZ2-44VHE-RDP-UNV-L940-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: P390389
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: 22CZ2-44VHE-RDP-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2654.3 lumens
Efficiency: N/A
Efficacy: 81.4 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

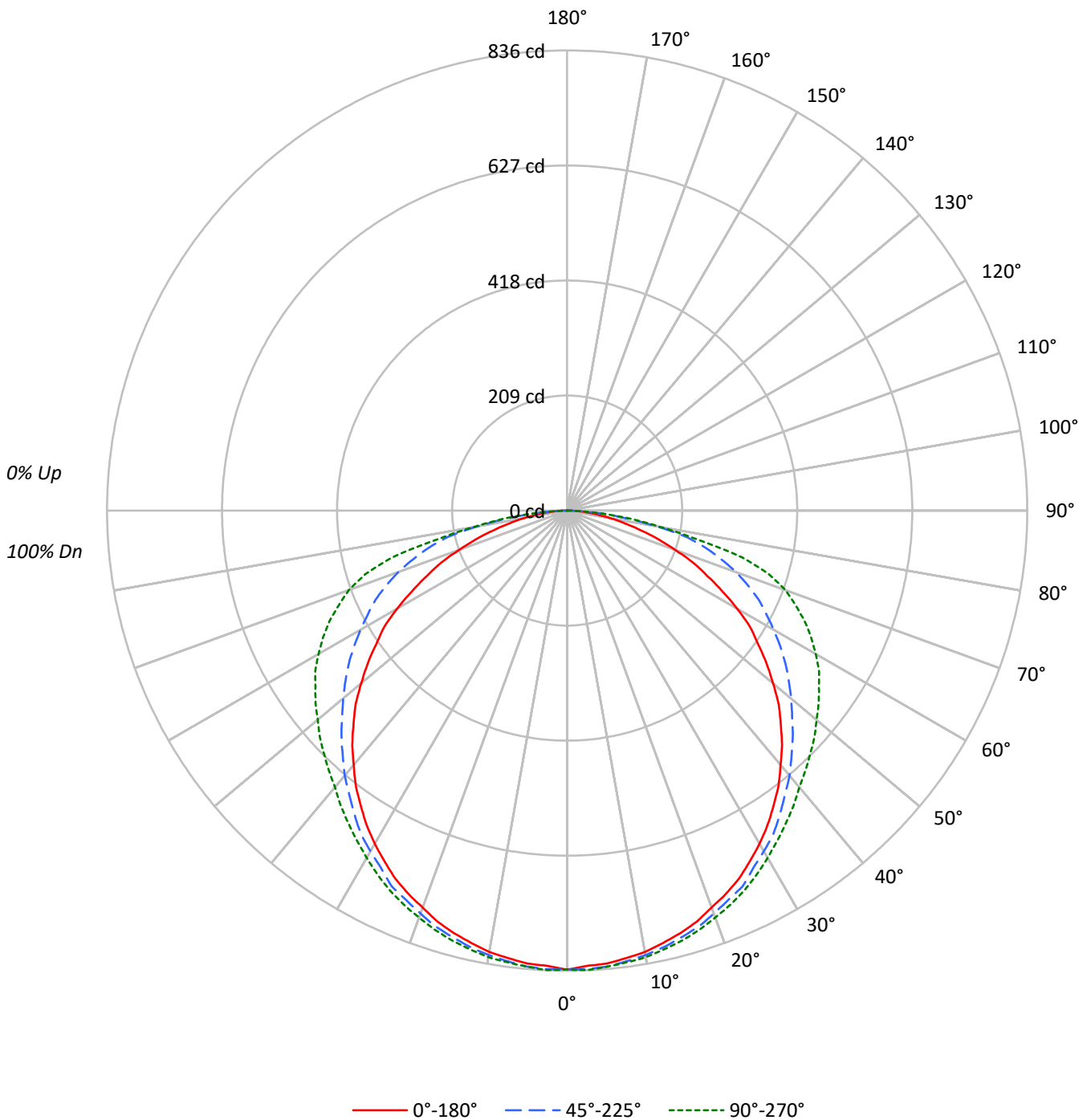
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2244	2244	2244
5°	2231	2247	2247
10°	2225	2241	2252
15°	2214	2236	2252
20°	2198	2231	2253
25°	2192	2238	2261
30°	2172	2221	2263
35°	2149	2213	2277
40°	2120	2209	2305
45°	2088	2207	2378
50°	2044	2223	2477
55°	1988	2272	2620
60°	1923	2333	2806
65°	1791	2450	3033
70°	1644	2566	3319
75°	1441	2700	3431
80°	1241	2572	2693
85°	1084	1868	2050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	3.0
10°-20°	226.4	8.5
20°-30°	345.5	13.0
30°-40°	421.8	15.9
40°-50°	451.0	17.0
50°-60°	435.4	16.4
60°-70°	374.8	14.1
70°-80°	253.6	9.6
80°-90°	66.9	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°	650.8	24.5
0°-40°	1072.6	40.4
0°-60°	1959.0	73.8
0°-90°	2654.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2654.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	826	828	832	832	832	78
15°	795	797	802	806	808	224
25°	738	742	754	758	762	340
35°	654	660	674	687	693	409
45°	549	558	580	609	625	424
55°	424	437	484	533	558	380
65°	281	308	385	445	476	280
75°	139	184	260	312	330	149
85°	35	49	60	62	66	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.8	833.8	833.8	833.8	833.8
2.5°	827.9	829.9	833.8	833.8	835.7
5°	826.0	827.9	831.8	831.8	831.8
7.5°	820.1	822.0	826.0	827.9	827.9
10°	814.2	816.2	820.1	822.0	824.0
12.5°	804.5	806.4	812.3	816.2	816.2
15°	794.7	796.7	802.5	806.4	808.4
17.5°	783.0	786.9	792.8	796.7	798.6
20°	767.4	771.3	779.1	784.9	786.9
22.5°	753.7	757.6	765.4	771.3	775.2
25°	738.1	742.0	753.7	757.6	761.5
27.5°	718.6	722.5	732.2	740.0	745.9
30°	699.0	702.9	714.7	724.4	728.3
32.5°	677.6	683.4	697.1	704.9	710.7
35°	654.1	660.0	673.6	687.3	693.2
37.5°	630.7	636.5	650.2	667.8	675.6
40°	603.4	611.2	628.7	652.2	656.1
42.5°	578.0	587.7	603.4	630.7	640.5
45°	548.7	558.4	579.9	609.2	624.8
47.5°	521.3	531.1	554.5	589.7	609.2
50°	488.2	501.8	531.1	572.1	591.6
52.5°	456.9	468.6	507.7	552.6	576.0
55°	423.7	437.4	484.2	533.1	558.4
57.5°	394.4	406.1	458.9	513.5	542.8
60°	357.3	372.9	433.5	492.1	521.3
62.5°	318.3	341.7	408.1	468.6	499.9
65°	281.2	308.5	384.7	445.2	476.4
67.5°	248.0	277.3	355.4	419.8	449.1
70°	208.9	246.0	326.1	388.6	421.8
72.5°	173.8	214.8	292.9	355.4	384.7
75°	138.6	183.5	259.7	312.4	330.0
77.5°	107.4	150.4	222.6	238.2	240.2
80°	80.1	119.1	166.0	167.9	173.8
82.5°	54.7	84.0	107.4	117.2	119.1
85°	35.1	48.8	60.5	62.5	66.4
87.5°	15.6	17.6	21.5	19.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)