

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: P390384

Luminaire Tested: **22CZ2-44VHE-RDP-UNV-L935-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: P390384  
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-L935-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2563.2 lumens  
Efficiency: N/A  
Efficacy: 78.6 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

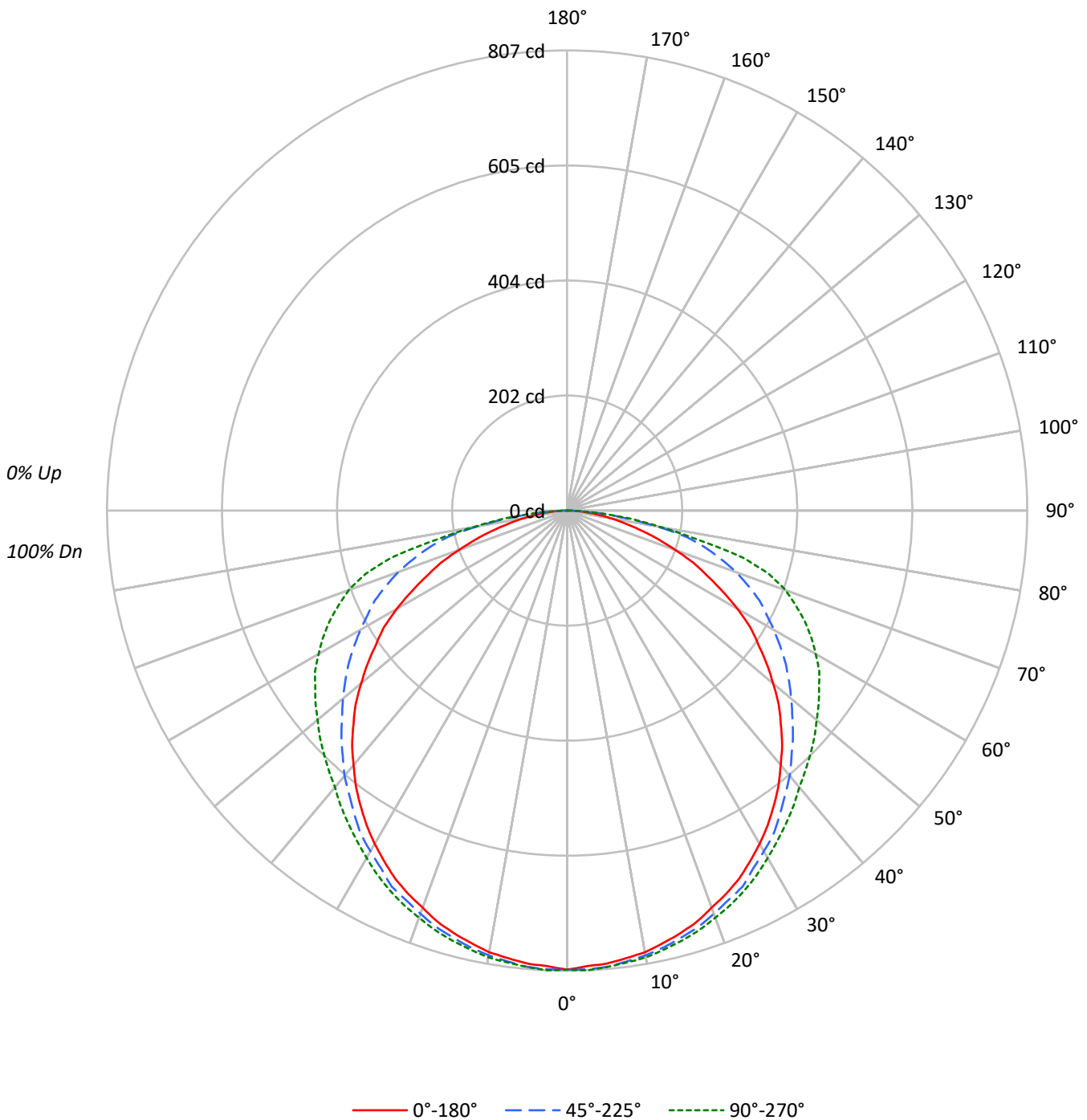
Input Watts (W): 32.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2167	2167	2167
5°	2155	2170	2170
10°	2149	2164	2174
15°	2138	2159	2175
20°	2122	2154	2176
25°	2116	2161	2184
30°	2097	2144	2185
35°	2075	2137	2199
40°	2047	2133	2226
45°	2017	2131	2296
50°	1973	2147	2392
55°	1920	2194	2530
60°	1857	2253	2710
65°	1729	2365	2930
70°	1588	2478	3205
75°	1392	2608	3314
80°	1198	2484	2600
85°	1047	1806	1979



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.2	3.0
10°-20°	218.7	8.5
20°-30°	333.6	13.0
30°-40°	407.4	15.9
40°-50°	435.6	17.0
50°-60°	420.4	16.4
60°-70°	361.9	14.1
70°-80°	244.9	9.6
80°-90°	64.6	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°	628.5	24.5
0°-40°	1035.8	40.4
0°-60°	1891.8	73.8
0°-90°	2563.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2563.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	798	800	803	803	803	76
15°	767	769	775	779	781	217
25°	713	716	728	732	735	328
35°	632	637	650	664	669	395
45°	530	539	560	588	603	409
55°	409	422	468	515	539	367
65°	272	298	372	430	460	270
75°	134	177	251	302	319	144
85°	34	47	58	60	64	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	805.1	805.1	805.1	805.1	805.1
2.5°	799.5	801.4	805.1	805.1	807.0
5°	797.6	799.5	803.3	803.3	803.3
7.5°	791.9	793.8	797.6	799.5	799.5
10°	786.3	788.2	791.9	793.8	795.7
12.5°	776.9	778.7	784.4	788.2	788.2
15°	767.4	769.3	775.0	778.7	780.6
17.5°	756.1	759.9	765.5	769.3	771.2
20°	741.0	744.8	752.3	758.0	759.9
22.5°	727.8	731.6	739.2	744.8	748.6
25°	712.8	716.5	727.8	731.6	735.4
27.5°	693.9	697.7	707.1	714.6	720.3
30°	675.0	678.8	690.1	699.6	703.3
32.5°	654.3	660.0	673.2	680.7	686.4
35°	631.7	637.3	650.5	663.7	669.4
37.5°	609.0	614.7	627.9	644.9	652.4
40°	582.6	590.2	607.2	629.8	633.6
42.5°	558.1	567.6	582.6	609.0	618.5
45°	529.9	539.3	560.0	588.3	603.4
47.5°	503.5	512.9	535.5	569.4	588.3
50°	471.4	484.6	512.9	552.5	571.3
52.5°	441.2	452.5	490.3	533.6	556.2
55°	409.2	422.4	467.6	514.8	539.3
57.5°	380.9	392.2	443.1	495.9	524.2
60°	345.1	360.1	418.6	475.2	503.5
62.5°	307.4	330.0	394.1	452.5	482.7
65°	271.5	297.9	371.5	429.9	460.1
67.5°	239.5	267.8	343.2	405.4	433.7
70°	201.8	237.6	314.9	375.2	407.3
72.5°	167.8	207.4	282.8	343.2	371.5
75°	133.9	177.2	250.8	301.7	318.7
77.5°	103.7	145.2	215.0	230.0	231.9
80°	77.3	115.0	160.3	162.2	167.8
82.5°	52.8	81.1	103.7	113.1	115.0
85°	33.9	47.1	58.5	60.3	64.1
87.5°	15.1	17.0	20.7	18.9	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)