

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: P390387

Luminaire Tested: **22CZ2-44VHE-RDP-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: P390387  
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-SDWPD1-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: 2589.7 lumens  
Efficiency: N/A  
Efficacy: 79.4 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

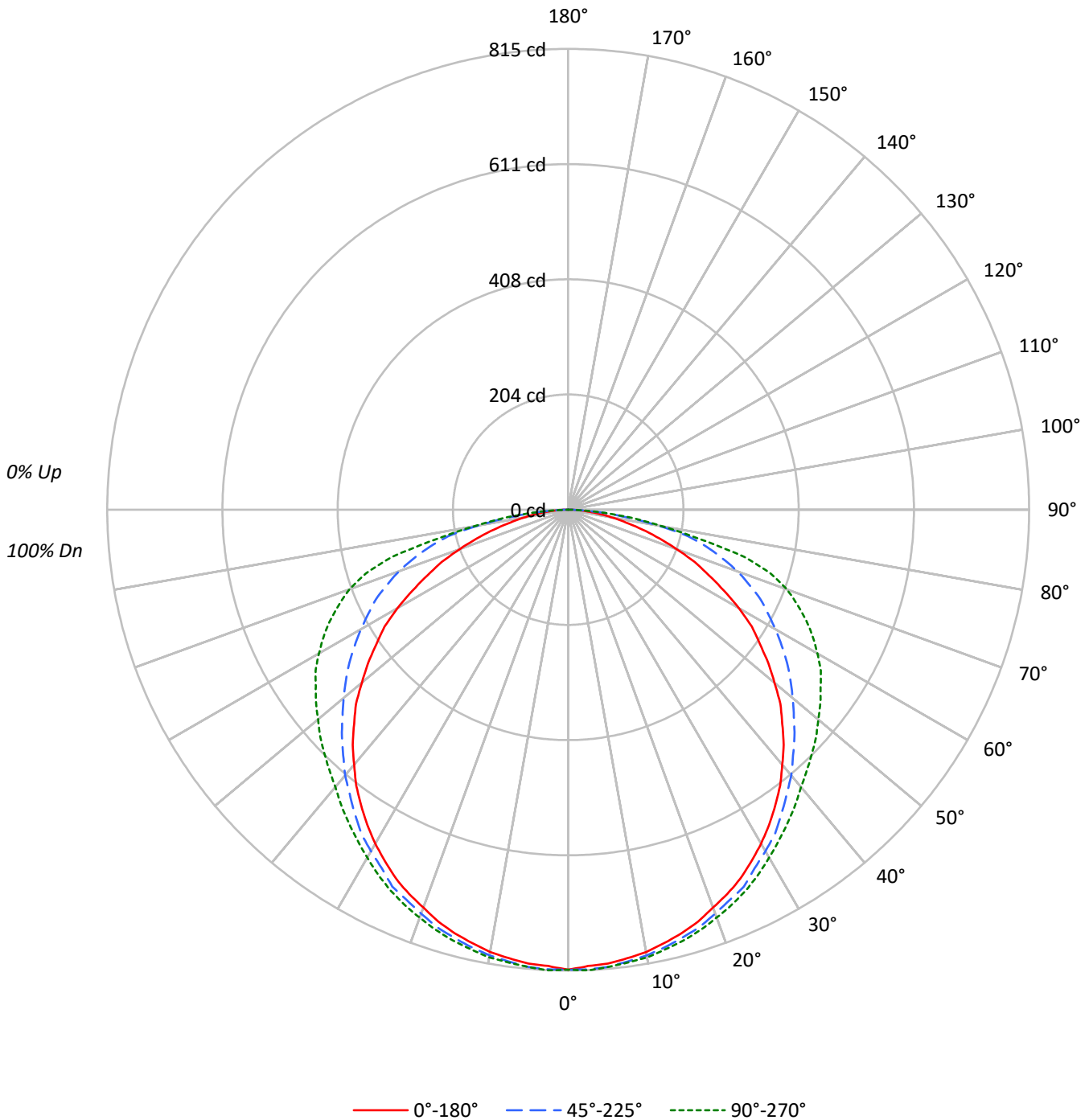
Input Watts (W): 32.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2189	2189	2189
5°	2177	2192	2192
10°	2171	2186	2197
15°	2160	2181	2197
20°	2144	2177	2198
25°	2138	2184	2206
30°	2119	2167	2208
35°	2097	2159	2222
40°	2068	2155	2249
45°	2037	2153	2320
50°	1994	2169	2416
55°	1939	2217	2556
60°	1876	2276	2738
65°	1747	2390	2960
70°	1603	2503	3238
75°	1407	2635	3348
80°	1210	2509	2628
85°	1059	1825	2001



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.9	3.0
10°-20°	220.9	8.5
20°-30°	337.1	13.0
30°-40°	411.6	15.9
40°-50°	440.1	17.0
50°-60°	424.8	16.4
60°-70°	365.6	14.1
70°-80°	247.4	9.6
80°-90°	65.3	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°	635.0	24.5
0°-40°	1046.5	40.4
0°-60°	1911.4	73.8
0°-90°	2589.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2589.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	806	808	812	812	812	77
15°	775	777	783	787	789	219
25°	720	724	735	739	743	331
35°	638	644	657	671	676	399
45°	535	545	566	594	610	413
55°	413	427	472	520	545	370
65°	274	301	375	434	465	273
75°	135	179	253	305	322	145
85°	34	48	59	61	65	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	813.5	813.5	813.5	813.5	813.5
2.5°	807.8	809.7	813.5	813.5	815.4
5°	805.8	807.8	811.6	811.6	811.6
7.5°	800.1	802.0	805.8	807.8	807.8
10°	794.4	796.3	800.1	802.0	803.9
12.5°	784.9	786.8	792.5	796.3	796.3
15°	775.4	777.3	783.0	786.8	788.7
17.5°	763.9	767.7	773.5	777.3	779.2
20°	748.7	752.5	760.1	765.8	767.7
22.5°	735.4	739.2	746.8	752.5	756.3
25°	720.1	723.9	735.4	739.2	743.0
27.5°	701.1	704.9	714.4	722.0	727.7
30°	682.0	685.8	697.3	706.8	710.6
32.5°	661.1	666.8	680.1	687.7	693.4
35°	638.2	643.9	657.3	670.6	676.3
37.5°	615.3	621.1	634.4	651.5	659.2
40°	588.7	596.3	613.4	636.3	640.1
42.5°	563.9	573.4	588.7	615.3	624.9
45°	535.3	544.9	565.8	594.4	609.6
47.5°	508.7	518.2	541.0	575.3	594.4
50°	476.3	489.6	518.2	558.2	577.2
52.5°	445.8	457.2	495.3	539.1	562.0
55°	413.4	426.7	472.5	520.1	544.9
57.5°	384.8	396.3	447.7	501.0	529.6
60°	348.6	363.9	422.9	480.1	508.7
62.5°	310.5	333.4	398.2	457.2	487.7
65°	274.3	301.0	375.3	434.4	464.8
67.5°	241.9	270.5	346.7	409.6	438.2
70°	203.8	240.0	318.1	379.1	411.5
72.5°	169.6	209.6	285.8	346.7	375.3
75°	135.3	179.1	253.4	304.8	322.0
77.5°	104.8	146.7	217.2	232.4	234.3
80°	78.1	116.2	161.9	163.8	169.6
82.5°	53.3	81.9	104.8	114.3	116.2
85°	34.3	47.6	59.1	61.0	64.8
87.5°	15.2	17.1	21.0	19.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)