

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: P387850

Luminaire Tested: **22CZ2-32-SQR-UNV-L950-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: P387850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-32-SQR-UNV-L950-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2820.7 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

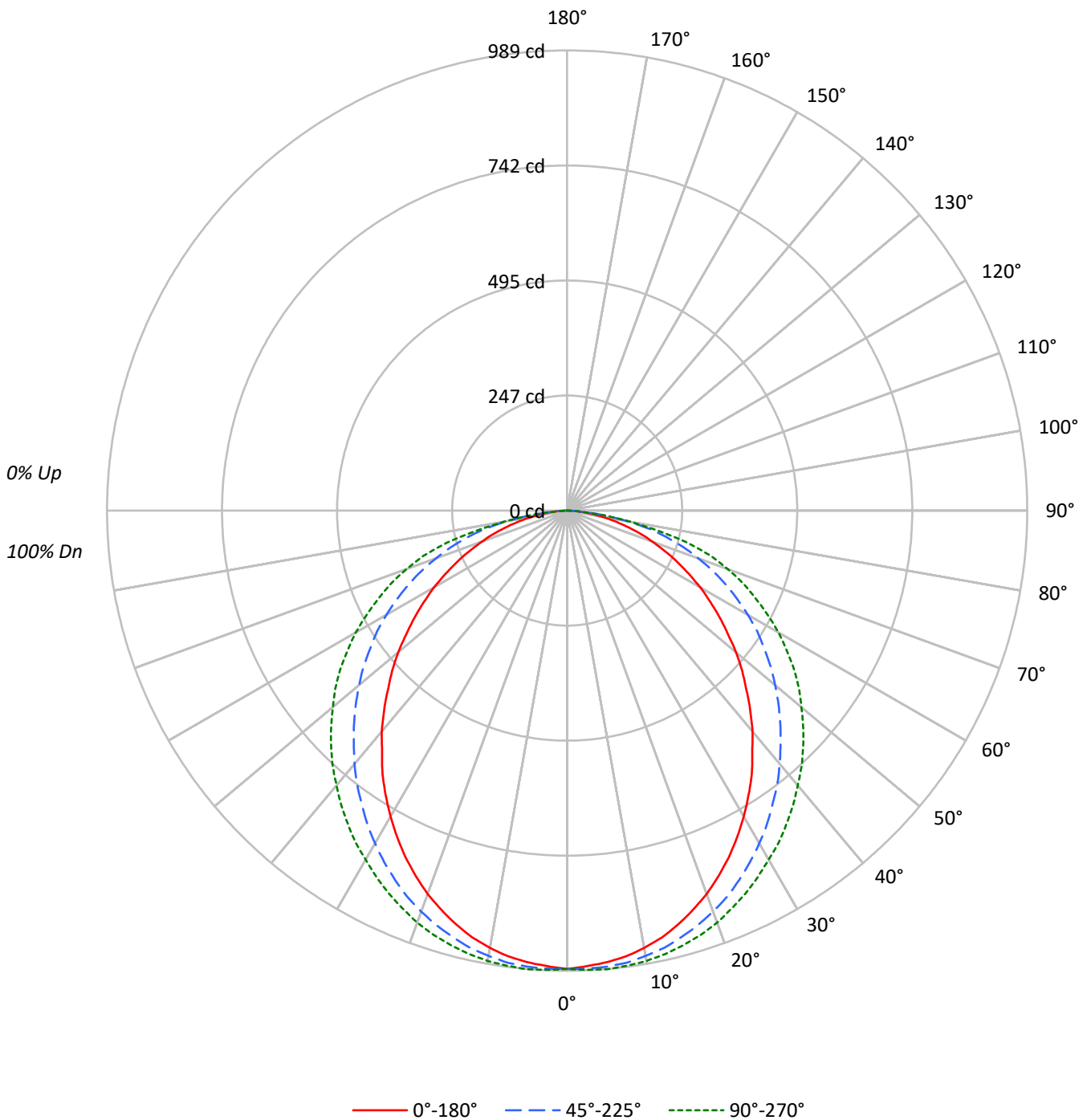
Input Watts (W): 26.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2651	2651	2651
5°	2633	2658	2673
10°	2608	2656	2685
15°	2566	2644	2693
20°	2511	2626	2699
25°	2441	2600	2695
30°	2359	2567	2692
35°	2274	2529	2700
40°	2178	2497	2709
45°	2074	2466	2731
50°	1984	2444	2752
55°	1878	2425	2795
60°	1780	2414	2824
65°	1663	2395	2848
70°	1527	2360	2886
75°	1378	2297	2784
80°	1182	2033	2095
85°	951	1198	951



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.4	3.3
10°-20°	267.1	9.5
20°-30°	401.1	14.2
30°-40°	478.4	17.0
40°-50°	494.6	17.5
50°-60°	454.8	16.1
60°-70°	362.0	12.8
70°-80°	221.2	7.8
80°-90°	48.1	1.7
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°	761.6	27.0
0°-40°	1240.0	44.0
0°-60°	2189.4	77.6
0°-90°	2820.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2820.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	985	985	985	985	985	
5°	975	977	984	988	989	92
15°	921	932	949	963	967	259
25°	822	842	876	900	908	378
35°	692	722	770	810	822	432
45°	545	584	648	700	718	421
55°	400	444	517	576	596	358
65°	261	305	376	428	447	259
75°	132	171	221	260	268	141
85°	31	38	39	34	31	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	985.3	985.3	985.3	985.3	985.3
2.5°	980.0	981.3	985.3	988.0	988.0
5°	974.6	977.3	984.0	988.0	989.4
7.5°	966.6	970.6	980.0	985.3	986.7
10°	954.5	959.9	972.0	980.0	982.7
12.5°	939.8	947.9	962.6	973.3	976.0
15°	921.1	931.8	949.2	962.6	966.6
17.5°	899.7	913.0	934.5	950.5	955.9
20°	876.9	890.3	917.1	935.8	942.5
22.5°	850.1	867.5	898.3	919.7	925.1
25°	822.0	842.1	875.6	899.7	907.7
27.5°	791.2	815.3	851.5	880.9	887.6
30°	759.1	784.5	826.0	858.2	866.2
32.5°	725.6	755.1	799.2	835.4	846.1
35°	692.1	721.6	769.8	810.0	822.0
37.5°	653.3	688.1	741.7	783.2	797.9
40°	619.9	653.3	710.9	756.4	771.1
42.5°	582.4	618.5	678.8	728.3	745.7
45°	544.9	583.7	648.0	700.2	717.6
47.5°	510.1	548.9	615.8	670.7	688.1
50°	473.9	514.1	583.7	639.9	657.3
52.5°	435.1	479.3	551.6	607.8	627.9
55°	400.3	444.5	516.8	575.7	595.8
57.5°	364.1	409.7	484.6	540.9	559.6
60°	330.7	374.9	448.5	503.4	524.8
62.5°	294.5	340.0	412.3	465.9	486.0
65°	261.1	305.2	376.2	428.4	447.2
67.5°	227.6	271.8	338.7	388.2	409.7
70°	194.1	238.3	299.9	348.1	366.8
72.5°	164.7	203.5	262.4	306.6	324.0
75°	132.5	171.4	220.9	259.7	267.8
77.5°	103.1	137.9	179.4	196.8	199.5
80°	76.3	103.1	131.2	135.2	135.2
82.5°	50.9	71.0	81.7	83.0	81.7
85°	30.8	37.5	38.8	33.5	30.8
87.5°	10.7	10.7	6.7	4.0	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)