

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: P387849

Luminaire Tested: **22CZ2-32-SQR-UNV-L950-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: P387849  
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-SDWPD1-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: 2786.7 lumens  
Efficiency: N/A  
Efficacy: 104.4 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

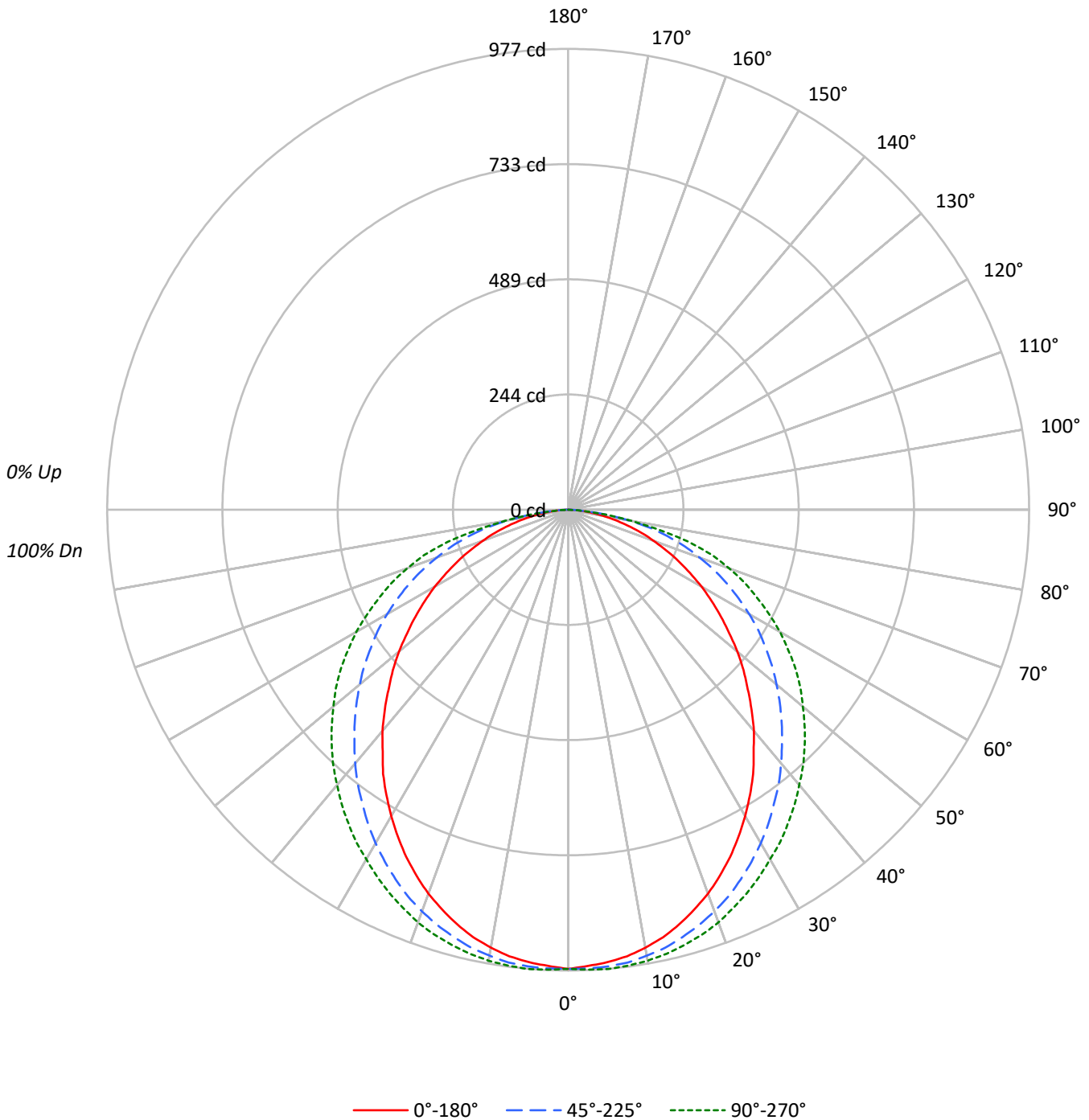
Input Watts (W): 26.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2620	2620	2620
5°	2601	2626	2640
10°	2577	2624	2653
15°	2535	2613	2660
20°	2481	2594	2666
25°	2411	2568	2662
30°	2330	2536	2659
35°	2246	2498	2668
40°	2151	2467	2676
45°	2049	2436	2698
50°	1960	2414	2719
55°	1856	2395	2761
60°	1758	2385	2791
65°	1642	2367	2813
70°	1509	2331	2851
75°	1361	2269	2750
80°	1168	2008	2070
85°	939	1186	939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.3	3.3
10°-20°	263.9	9.5
20°-30°	396.3	14.2
30°-40°	472.6	17.0
40°-50°	488.7	17.5
50°-60°	449.3	16.1
60°-70°	357.7	12.8
70°-80°	218.5	7.8
80°-90°	47.5	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°	752.4	27.0
0°-40°	1225.1	44.0
0°-60°	2163.0	77.6
0°-90°	2786.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2786.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	974	974	974	974	974	
5°	963	966	972	976	977	91
15°	910	921	938	951	955	256
25°	812	832	865	889	897	374
35°	684	713	760	800	812	427
45°	538	577	640	692	709	416
55°	396	439	510	569	589	354
65°	258	302	372	423	442	255
75°	131	169	218	257	264	139
85°	30	37	38	33	30	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	973.5	973.5	973.5	973.5	973.5
2.5°	968.2	969.5	973.5	976.1	976.1
5°	962.9	965.5	972.1	976.1	977.4
7.5°	954.9	958.9	968.2	973.5	974.8
10°	943.0	948.3	960.2	968.2	970.8
12.5°	928.5	936.4	951.0	961.6	964.2
15°	910.0	920.6	937.8	951.0	954.9
17.5°	888.8	902.0	923.2	939.1	944.4
20°	866.3	879.6	906.0	924.5	931.1
22.5°	839.9	857.1	887.5	908.7	913.9
25°	812.1	831.9	865.0	888.8	896.7
27.5°	781.7	805.5	841.2	870.3	876.9
30°	749.9	775.1	816.1	847.8	855.7
32.5°	716.9	746.0	789.6	825.3	835.9
35°	683.8	712.9	760.5	800.2	812.1
37.5°	645.4	679.8	732.7	773.7	788.3
40°	612.4	645.4	702.3	747.3	761.8
42.5°	575.3	611.1	670.6	719.5	736.7
45°	538.3	576.7	640.2	691.7	708.9
47.5°	503.9	542.3	608.4	662.6	679.8
50°	468.2	507.9	576.7	632.2	649.4
52.5°	429.9	473.5	544.9	600.5	620.3
55°	395.5	439.1	510.5	568.7	588.6
57.5°	359.8	404.7	478.8	534.3	552.9
60°	326.7	370.3	443.1	497.3	518.5
62.5°	291.0	336.0	407.4	460.3	480.1
65°	257.9	301.6	371.7	423.2	441.8
67.5°	224.8	268.5	334.6	383.6	404.7
70°	191.8	235.4	296.3	343.9	362.4
72.5°	162.7	201.0	259.2	302.9	320.1
75°	130.9	169.3	218.2	256.6	264.5
77.5°	101.8	136.2	177.2	194.4	197.1
80°	75.4	101.8	129.6	133.6	133.6
82.5°	50.3	70.1	80.7	82.0	80.7
85°	30.4	37.0	38.4	33.1	30.4
87.5°	10.6	10.6	6.6	4.0	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)