

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: P387875

Luminaire Tested: **22CZ2-34HE-SQR-UNV-L950-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: P387875  
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: 22CZ2-34HE-SQR-UNV-L950-CD1-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: 2948.5 lumens  
Efficiency: N/A  
Efficacy: 114.3 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

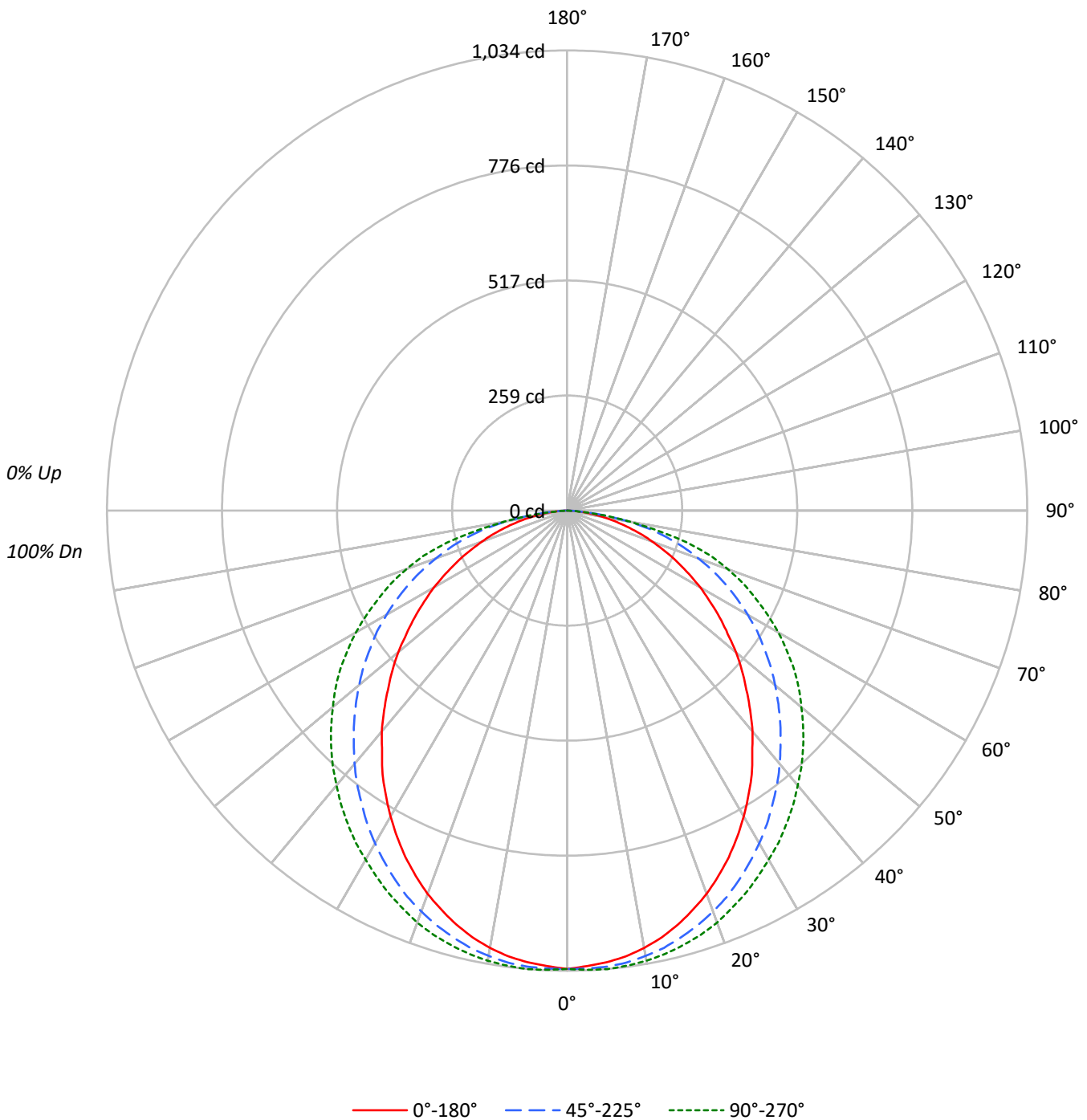
Input Watts (W): 25.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2772	2772	2772
5°	2752	2779	2794
10°	2726	2776	2807
15°	2682	2764	2815
20°	2625	2745	2821
25°	2551	2717	2817
30°	2466	2683	2813
35°	2377	2644	2823
40°	2276	2610	2832
45°	2168	2578	2855
50°	2074	2555	2876
55°	1963	2534	2921
60°	1861	2523	2953
65°	1738	2504	2976
70°	1596	2467	3017
75°	1440	2401	2910
80°	1237	2125	2190
85°	994	1254	994



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.6	3.3
10°-20°	279.2	9.5
20°-30°	419.3	14.2
30°-40°	500.1	17.0
40°-50°	517.0	17.5
50°-60°	475.4	16.1
60°-70°	378.4	12.8
70°-80°	231.2	7.8
80°-90°	50.3	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°	796.1	27.0
0°-40°	1296.2	44.0
0°-60°	2288.6	77.6
0°-90°	2948.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2948.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1019	1022	1029	1033	1034	97
15°	963	974	992	1006	1010	271
25°	859	880	915	940	949	395
35°	724	754	805	847	859	451
45°	570	610	677	732	750	440
55°	418	465	540	602	623	374
65°	273	319	393	448	467	270
75°	138	179	231	272	280	148
85°	32	39	41	35	32	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1030.0	1030.0	1030.0	1030.0	1030.0
2.5°	1024.4	1025.8	1030.0	1032.8	1032.8
5°	1018.8	1021.6	1028.6	1032.8	1034.2
7.5°	1010.4	1014.6	1024.4	1030.0	1031.4
10°	997.8	1003.4	1016.0	1024.4	1027.2
12.5°	982.4	990.8	1006.2	1017.4	1020.2
15°	962.8	974.0	992.2	1006.2	1010.4
17.5°	940.4	954.4	976.8	993.6	999.2
20°	916.6	930.6	958.6	978.2	985.2
22.5°	888.6	906.8	939.0	961.4	967.0
25°	859.3	880.2	915.2	940.4	948.8
27.5°	827.1	852.3	890.0	920.8	927.8
30°	793.5	820.1	863.4	897.0	905.4
32.5°	758.5	789.3	835.5	873.2	884.4
35°	723.5	754.3	804.7	846.7	859.3
37.5°	682.9	719.3	775.3	818.7	834.1
40°	647.9	682.9	743.1	790.7	806.1
42.5°	608.8	646.5	709.5	761.3	779.5
45°	569.6	610.2	677.3	731.9	750.1
47.5°	533.2	573.8	643.7	701.1	719.3
50°	495.4	537.4	610.2	668.9	687.1
52.5°	454.8	501.0	576.6	635.3	656.3
55°	418.4	464.6	540.2	601.8	622.7
57.5°	380.6	428.2	506.6	565.4	585.0
60°	345.7	391.8	468.8	526.2	548.6
62.5°	307.9	355.5	431.0	487.0	508.0
65°	272.9	319.1	393.2	447.8	467.4
67.5°	237.9	284.1	354.1	405.8	428.2
70°	202.9	249.1	313.5	363.9	383.4
72.5°	172.1	212.7	274.3	320.5	338.7
75°	138.5	179.1	230.9	271.5	279.9
77.5°	107.8	144.1	187.5	205.7	208.5
80°	79.8	107.8	137.1	141.3	141.3
82.5°	53.2	74.2	85.4	86.8	85.4
85°	32.2	39.2	40.6	35.0	32.2
87.5°	11.2	11.2	7.0	4.2	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)