

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: P387894

Luminaire Tested: **22CZ2-34VHE-SQR-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: P387894
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: 22CZ2-34VHE-SQR-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2880.0 lumens
Efficiency: N/A
Efficacy: 114.7 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

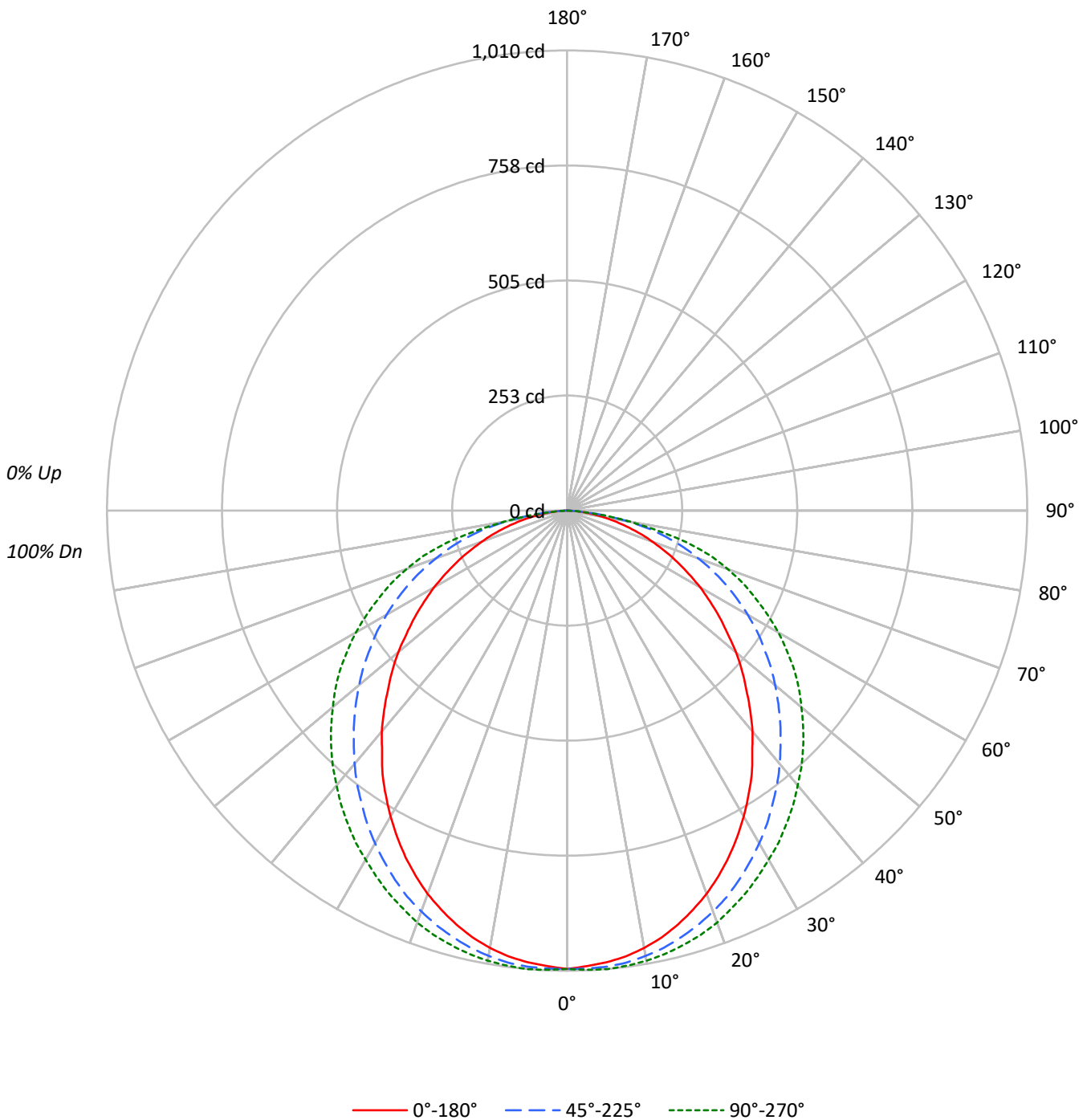
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2707	2707	2707
5°	2688	2714	2729
10°	2663	2712	2742
15°	2620	2700	2749
20°	2564	2681	2756
25°	2492	2654	2752
30°	2408	2621	2748
35°	2322	2582	2757
40°	2223	2550	2766
45°	2117	2518	2788
50°	2026	2495	2810
55°	1917	2475	2854
60°	1817	2464	2884
65°	1697	2446	2907
70°	1559	2409	2947
75°	1407	2345	2843
80°	1207	2077	2140
85°	969	1223	969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	3.3
10°-20°	272.7	9.5
20°-30°	409.6	14.2
30°-40°	488.5	17.0
40°-50°	505.0	17.5
50°-60°	464.3	16.1
60°-70°	369.6	12.8
70°-80°	225.8	7.8
80°-90°	49.1	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°	777.6	27.0
0°-40°	1266.1	44.0
0°-60°	2235.5	77.6
0°-90°	2880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	995	998	1005	1009	1010	94
15°	940	951	969	983	987	265
25°	839	860	894	919	927	386
35°	707	737	786	827	839	441
45°	556	596	662	715	733	430
55°	409	454	528	588	608	366
65°	266	312	384	437	457	264
75°	135	175	226	265	273	144
85°	31	38	40	34	31	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1006.1	1006.1	1006.1	1006.1	1006.1
2.5°	1000.6	1002.0	1006.1	1008.8	1008.8
5°	995.1	997.9	1004.7	1008.8	1010.2
7.5°	986.9	991.0	1000.6	1006.1	1007.4
10°	974.6	980.1	992.4	1000.6	1003.3
12.5°	959.6	967.8	982.8	993.8	996.5
15°	940.4	951.4	969.1	982.8	986.9
17.5°	918.6	932.2	954.1	970.5	976.0
20°	895.3	909.0	936.3	955.5	962.3
22.5°	868.0	885.8	917.2	939.1	944.5
25°	839.3	859.8	894.0	918.6	926.8
27.5°	807.8	832.5	869.4	899.4	906.3
30°	775.0	801.0	843.4	876.2	884.4
32.5°	740.9	770.9	816.1	853.0	863.9
35°	706.7	736.8	786.0	827.0	839.3
37.5°	667.1	702.6	757.3	799.6	814.7
40°	632.9	667.1	725.8	772.3	787.3
42.5°	594.6	631.5	693.0	743.6	761.4
45°	556.3	596.0	661.6	714.9	732.7
47.5°	520.8	560.4	628.8	684.8	702.6
50°	483.9	524.9	596.0	653.4	671.2
52.5°	444.2	489.4	563.2	620.6	641.1
55°	408.7	453.8	527.6	587.8	608.3
57.5°	371.8	418.3	494.8	552.2	571.4
60°	337.6	382.7	457.9	514.0	535.8
62.5°	300.7	347.2	421.0	475.7	496.2
65°	266.5	311.7	384.1	437.4	456.6
67.5°	232.4	277.5	345.8	396.4	418.3
70°	198.2	243.3	306.2	355.4	374.5
72.5°	168.1	207.8	267.9	313.0	330.8
75°	135.3	175.0	225.5	265.2	273.4
77.5°	105.3	140.8	183.2	200.9	203.7
80°	77.9	105.3	134.0	138.1	138.1
82.5°	51.9	72.4	83.4	84.7	83.4
85°	31.4	38.3	39.6	34.2	31.4
87.5°	10.9	10.9	6.8	4.1	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)