

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: P881177

Luminaire Tested: **24CZ2-35VHE-SQR-UNV-B40**

Issue Date: 10/2/2024

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: P881177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-35VHE-SQR-UNV-B40
Description: 2X4 3500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

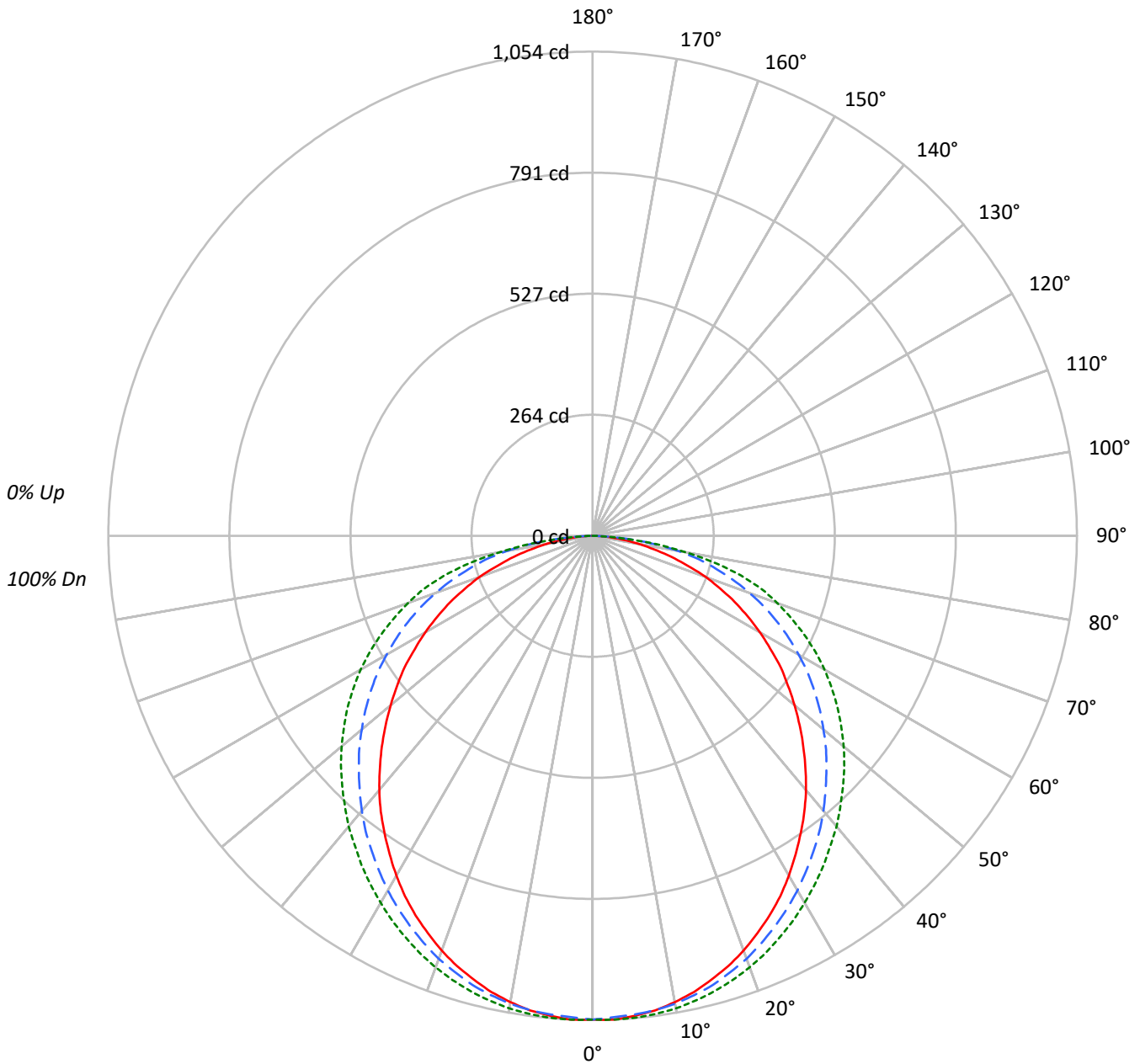
Lumens per Lamp: N/A
Luminaire Lumens: 3207.0 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 27
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	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	101	96	93	96	93	90	92	90	87	89	87	84	82																			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56																			
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48																			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																			
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36																			
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31																			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28																			
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25																			
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1487	1487	1487
5°	1487	1482	1492
10°	1477	1482	1497
15°	1461	1479	1500
20°	1443	1472	1501
25°	1419	1462	1501
30°	1392	1453	1504
35°	1360	1444	1509
40°	1331	1440	1522
45°	1295	1436	1538
50°	1260	1440	1566
55°	1231	1450	1601
60°	1189	1461	1646
65°	1141	1478	1695
70°	1082	1499	1763
75°	970	1520	1821
80°	816	1524	1653
85°	606	1153	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.8	3.1
10°-20°	286.1	8.9
20°-30°	433.1	13.5
30°-40°	523.9	16.3
40°-50°	553.0	17.2
50°-60°	521.5	16.3
60°-70°	430.0	13.4
70°-80°	282.0	8.8
80°-90°	77.5	2.4
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°	819.0	25.5
0°-40°	1342.9	41.9
0°-60°	2417.4	75.4
0°-90°	3207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	1049	1049	1046	1053	1053	100
15°	1000	1006	1012	1024	1026	282
25°	912	923	939	958	964	420
35°	790	810	838	867	876	494
45°	649	678	719	758	771	501
55°	500	535	589	633	651	445
65°	342	383	443	490	508	337
75°	178	223	279	323	334	188
85°	37	64	71	69	67	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.4	1053.4	1053.4	1053.4	1053.4
2.5°	1054.4	1053.4	1048.8	1054.9	1054.4
5°	1049.3	1049.3	1046.3	1053.4	1053.4
7.5°	1042.1	1042.6	1041.6	1049.8	1049.8
10°	1030.9	1032.9	1034.4	1043.7	1044.7
12.5°	1017.5	1021.2	1024.1	1035.5	1036.5
15°	1000.1	1005.8	1012.4	1024.1	1026.3
17.5°	982.1	988.9	996.0	1011.4	1014.0
20°	960.7	968.4	980.1	995.5	999.6
22.5°	936.6	947.3	959.6	978.1	983.2
25°	911.5	922.7	938.7	958.1	964.2
27.5°	884.4	897.6	915.6	938.1	944.7
30°	854.1	869.4	891.5	915.6	922.7
32.5°	822.3	840.2	864.8	891.5	899.7
35°	789.6	810.0	838.2	867.0	876.1
37.5°	757.2	777.7	811.1	841.3	850.0
40°	722.4	744.9	781.4	813.6	825.9
42.5°	685.5	712.2	750.6	786.5	798.2
45°	648.6	677.8	719.4	757.7	770.6
47.5°	611.2	643.5	689.1	728.0	742.9
50°	573.8	608.1	655.8	697.8	713.2
52.5°	535.9	571.8	623.5	668.1	682.0
55°	500.1	535.4	589.2	633.3	650.7
57.5°	458.5	498.5	555.3	600.0	616.9
60°	421.1	460.1	517.5	564.6	583.0
62.5°	380.6	420.6	481.1	528.2	546.2
65°	341.7	382.8	442.7	489.8	507.7
67.5°	299.7	342.8	404.3	449.9	467.3
70°	262.3	302.8	363.2	409.9	427.3
72.5°	216.7	262.9	320.7	366.8	385.8
75°	177.8	223.3	278.7	322.8	334.0
77.5°	136.8	182.4	237.2	265.9	273.6
80°	100.4	143.4	187.5	202.9	203.4
82.5°	67.6	105.6	130.7	138.4	137.3
85°	37.4	64.5	71.2	69.1	67.1
87.5°	15.4	21.5	17.4	12.3	9.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)