

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: P880894

Luminaire Tested: **24CZ2-45VHE-SQR-B2750-W2D-3500K**

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: P880894
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: 24CZ2-45VHE-SQR-B2750-W2D-3500K
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

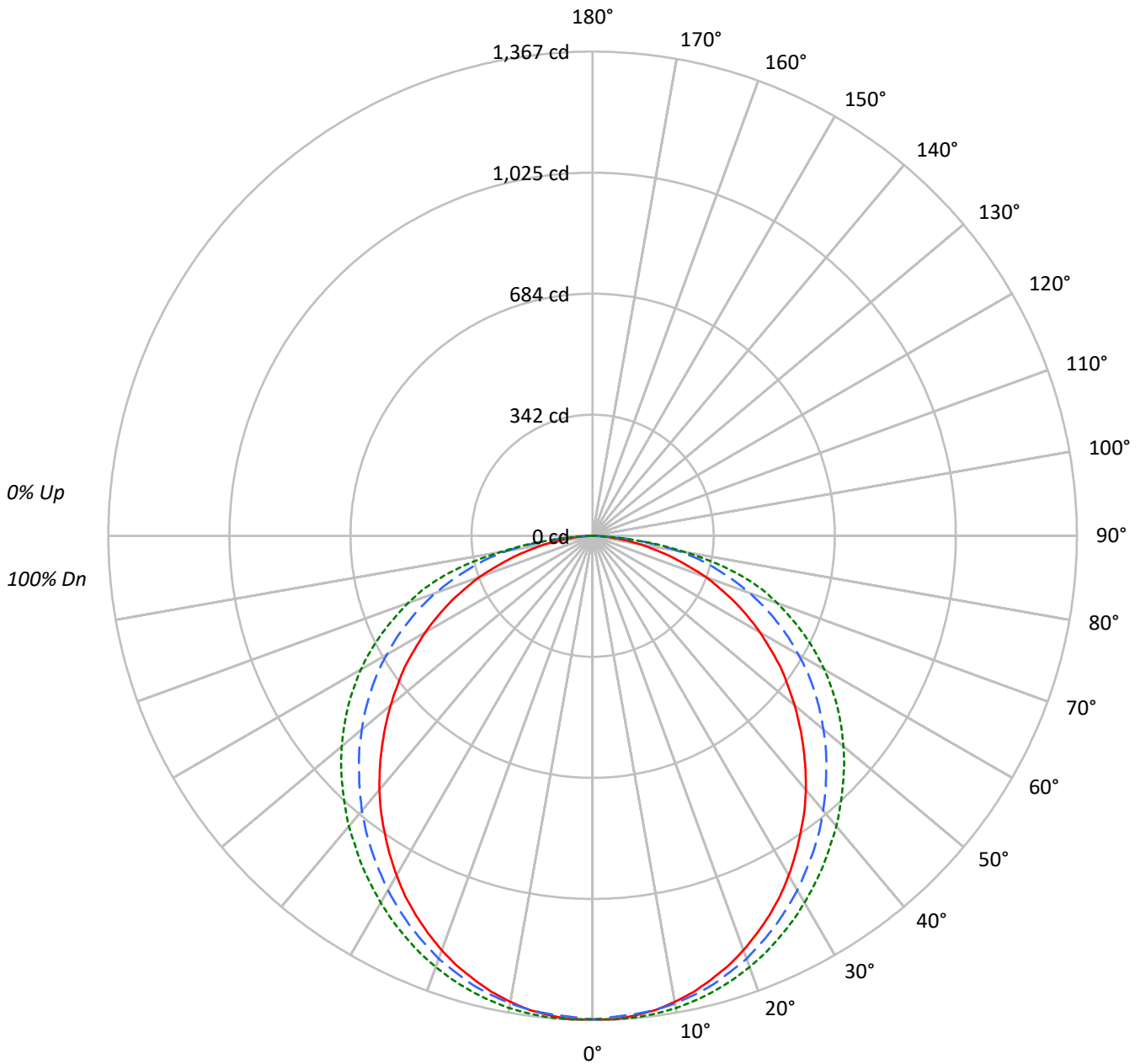
Lumens per Lamp: N/A
Luminaire Lumens: 4157.0 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 34
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				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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82				82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68				68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56				56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48				48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41				41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36				36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31				31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28				28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25				25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23				23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1927	1927	1927
5°	1927	1921	1935
10°	1915	1922	1941
15°	1894	1917	1944
20°	1870	1908	1946
25°	1840	1895	1946
30°	1804	1883	1949
35°	1763	1872	1957
40°	1725	1866	1972
45°	1678	1861	1994
50°	1633	1867	2030
55°	1595	1879	2075
60°	1541	1893	2133
65°	1479	1917	2198
70°	1403	1943	2286
75°	1257	1970	2361
80°	1058	1976	2142
85°	785	1495	1409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	3.1
10°-20°	370.8	8.9
20°-30°	561.4	13.5
30°-40°	679.1	16.3
40°-50°	716.8	17.2
50°-60°	676.0	16.3
60°-70°	557.3	13.4
70°-80°	365.6	8.8
80°-90°	100.5	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°	1061.6	25.5
0°-40°	1740.7	41.9
0°-60°	3133.6	75.4
0°-90°	4157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4157.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1360	1360	1356	1366	1366	129
15°	1296	1304	1312	1328	1330	366
25°	1182	1196	1217	1242	1250	544
35°	1024	1050	1086	1124	1136	641
45°	841	879	932	982	999	649
55°	648	694	764	821	843	577
65°	443	496	574	635	658	437
75°	230	290	361	418	433	244
85°	48	84	92	90	87	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.5	1365.5	1365.5	1365.5	1365.5
2.5°	1366.7	1365.5	1359.5	1367.4	1366.7
5°	1360.1	1360.1	1356.2	1365.5	1365.5
7.5°	1350.8	1351.5	1350.1	1360.8	1360.8
10°	1336.2	1338.9	1340.8	1352.9	1354.1
12.5°	1318.9	1323.6	1327.5	1342.2	1343.6
15°	1296.4	1303.7	1312.3	1327.5	1330.3
17.5°	1273.1	1281.8	1291.1	1311.0	1314.4
20°	1245.2	1255.2	1270.5	1290.4	1295.7
22.5°	1214.1	1227.9	1243.9	1267.8	1274.5
25°	1181.5	1196.1	1216.7	1241.9	1249.8
27.5°	1146.3	1163.5	1186.8	1216.0	1224.6
30°	1107.1	1127.0	1155.6	1186.8	1196.1
32.5°	1065.9	1089.1	1121.0	1155.6	1166.2
35°	1023.5	1049.9	1086.5	1123.8	1135.7
37.5°	981.5	1008.1	1051.3	1090.5	1101.7
40°	936.4	965.6	1012.8	1054.6	1070.6
42.5°	888.6	923.2	972.9	1019.5	1034.7
45°	840.8	878.6	932.5	982.2	998.8
47.5°	792.3	834.1	893.3	943.7	963.0
50°	743.8	788.3	850.1	904.5	924.4
52.5°	694.6	741.2	808.2	866.0	884.0
55°	648.2	694.0	763.8	820.8	843.4
57.5°	594.4	646.2	719.9	777.8	799.6
60°	545.9	596.4	670.8	731.9	755.7
62.5°	493.4	545.2	623.6	684.7	707.9
65°	443.0	496.2	573.9	635.0	658.1
67.5°	388.5	444.4	524.0	583.1	605.7
70°	340.1	392.5	470.8	531.3	553.9
72.5°	280.9	340.7	415.7	475.5	500.0
75°	230.5	289.5	361.2	418.5	433.0
77.5°	177.3	236.4	307.5	344.6	354.6
80°	130.2	185.9	243.1	263.0	263.6
82.5°	87.7	136.9	169.4	179.4	178.0
85°	48.5	83.7	92.3	89.6	87.0
87.5°	19.9	27.8	22.6	15.9	12.6
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)