

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: P880893

Luminaire Tested: **24CZ2-45VHE-SQR-B2750-W2D-3000K**

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: P880893
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-3000K
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

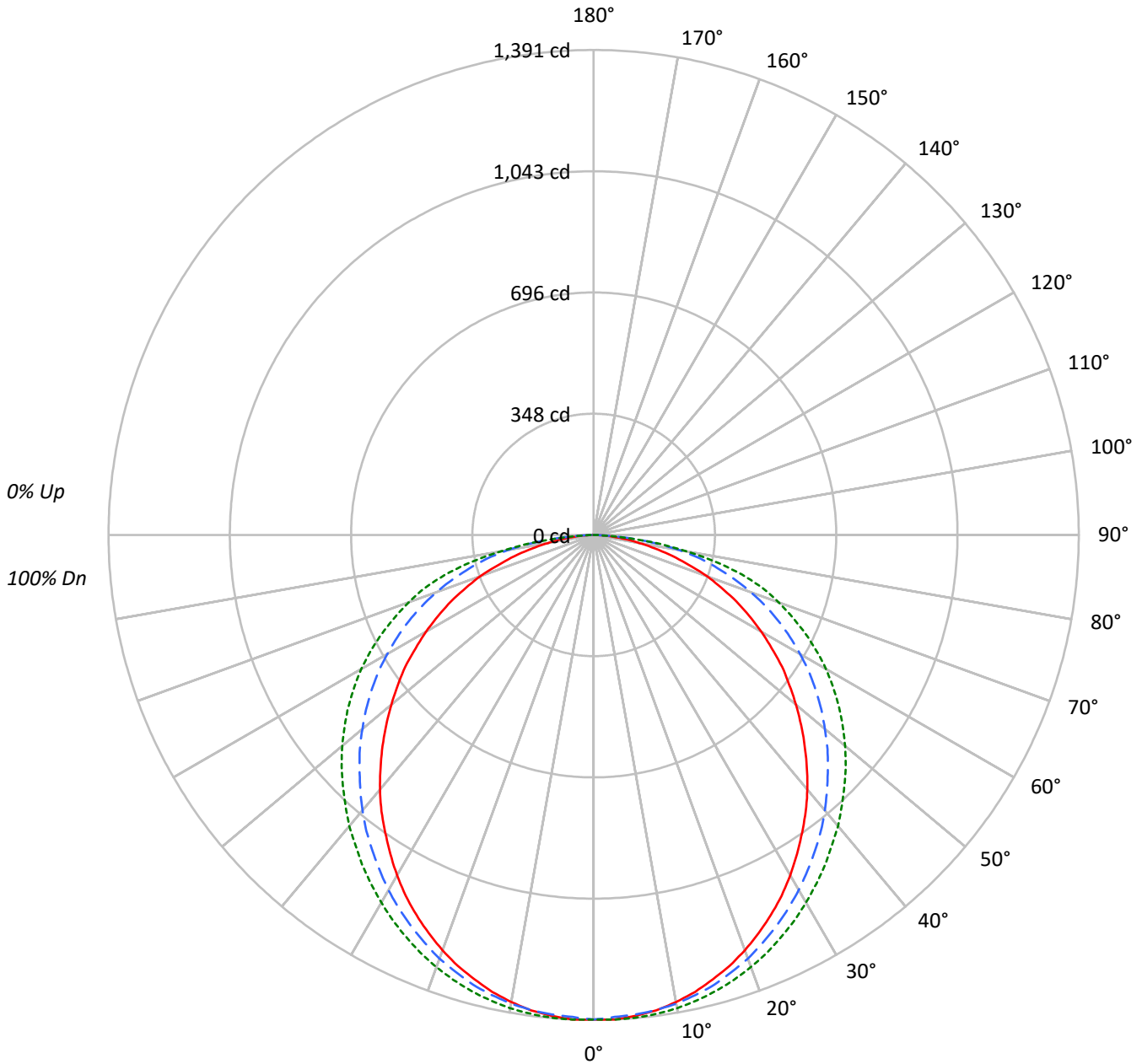
Lumens per Lamp: N/A
Luminaire Lumens: 4232.0 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

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					
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								
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°	1962	1962	1962
5°	1962	1956	1969
10°	1950	1956	1976
15°	1928	1952	1979
20°	1904	1943	1981
25°	1873	1929	1981
30°	1837	1917	1984
35°	1795	1906	1992
40°	1756	1900	2008
45°	1709	1895	2029
50°	1663	1900	2066
55°	1624	1913	2113
60°	1569	1928	2172
65°	1506	1951	2237
70°	1429	1978	2327
75°	1279	2006	2404
80°	1078	2012	2181
85°	800	1521	1435



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.7	3.1
10°-20°	377.5	8.9
20°-30°	571.5	13.5
30°-40°	691.4	16.3
40°-50°	729.8	17.2
50°-60°	688.2	16.3
60°-70°	567.4	13.4
70°-80°	372.2	8.8
80°-90°	102.3	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°	1080.8	25.5
0°-40°	1772.1	41.9
0°-60°	3190.1	75.4
0°-90°	4232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1385	1385	1381	1390	1390	131
15°	1320	1327	1336	1352	1354	372
25°	1203	1218	1239	1264	1272	554
35°	1042	1069	1106	1144	1156	652
45°	856	894	949	1000	1017	661
55°	660	706	778	836	859	588
65°	451	505	584	646	670	445
75°	235	295	368	426	441	248
85°	49	85	94	91	89	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1391.4	1390.1	1384.0	1392.1	1391.4
5°	1384.6	1384.6	1380.7	1390.1	1390.1
7.5°	1375.2	1375.9	1374.5	1385.3	1385.3
10°	1360.4	1363.0	1365.0	1377.3	1378.5
12.5°	1342.7	1347.5	1351.5	1366.4	1367.8
15°	1319.7	1327.2	1336.0	1351.5	1354.3
17.5°	1296.1	1304.9	1314.4	1334.7	1338.1
20°	1267.7	1277.9	1293.4	1313.7	1319.0
22.5°	1236.0	1250.1	1266.3	1290.7	1297.5
25°	1202.8	1217.7	1238.7	1264.3	1272.4
27.5°	1167.0	1184.5	1208.2	1238.0	1246.7
30°	1127.1	1147.3	1176.5	1208.2	1217.7
32.5°	1085.1	1108.8	1141.2	1176.5	1187.2
35°	1041.9	1068.9	1106.1	1144.0	1156.2
37.5°	999.2	1026.3	1070.3	1110.2	1121.6
40°	953.3	983.0	1031.1	1073.7	1089.9
42.5°	904.6	939.9	990.5	1037.9	1053.4
45°	856.0	894.4	949.3	999.9	1016.8
47.5°	806.6	849.2	909.4	960.7	980.3
50°	757.2	802.5	865.4	920.8	941.1
52.5°	707.2	754.6	822.8	881.6	899.9
55°	659.9	706.5	777.5	835.6	858.6
57.5°	605.1	657.8	732.8	791.8	814.1
60°	555.7	607.2	682.9	745.1	769.4
62.5°	502.3	555.0	634.8	697.0	720.7
65°	451.0	505.1	584.2	646.4	670.0
67.5°	395.5	452.4	533.5	593.7	616.7
70°	346.2	399.6	479.3	540.9	563.9
72.5°	286.0	346.9	423.2	484.1	509.1
75°	234.6	294.7	367.8	426.0	440.8
77.5°	180.5	240.7	313.0	350.8	361.0
80°	132.6	189.2	247.5	267.8	268.3
82.5°	89.3	139.3	172.5	182.6	181.2
85°	49.4	85.2	93.9	91.2	88.6
87.5°	20.3	28.3	23.0	16.2	12.8
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)