

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: P843094

Luminaire Tested: **24CZ2-45HE-SQR-UNV-B35**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843094
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P388488)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-SQR-UNV-B35
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Summary

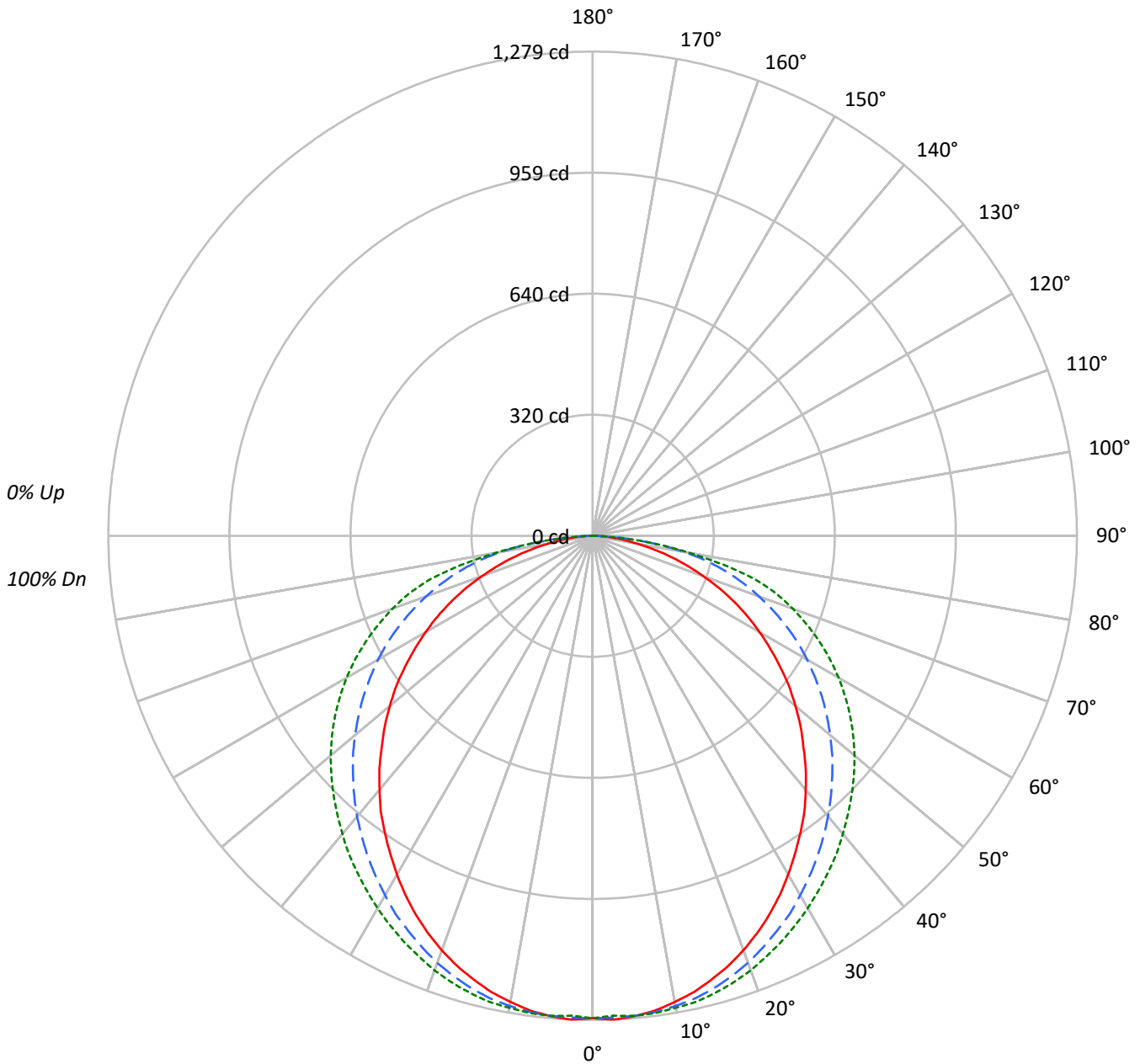
Lumens per Lamp: N/A
Luminaire Lumens: 3986.0 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 33
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P843094

CATALOG NUMBER: 24CZ2-45HE-SQR-UNV-B35

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	100	96	92	96	93	89	92	89	87	89	86	84	82																			
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67																			
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56																			
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47																			
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41																			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35																			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28																			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25																			
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1798	1798	1798
5°	1805	1803	1803
10°	1792	1807	1815
15°	1773	1808	1827
20°	1750	1803	1835
25°	1720	1793	1841
30°	1684	1787	1851
35°	1649	1783	1869
40°	1613	1782	1894
45°	1571	1786	1931
50°	1535	1798	1983
55°	1490	1817	2044
60°	1438	1846	2118
65°	1376	1881	2207
70°	1276	1928	2319
75°	1155	1995	2426
80°	973	2001	2086
85°	745	1512	1512



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	3.0
10°-20°	348.0	8.7
20°-30°	528.5	13.3
30°-40°	642.9	16.1
40°-50°	684.5	17.2
50°-60°	651.9	16.4
60°-70°	545.2	13.7
70°-80°	363.5	9.1
80°-90°	100.6	2.5
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°	997.5	25.0
0°-40°	1640.3	41.2
0°-60°	2976.8	74.7
0°-90°	3986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3986.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1274	1266	1273	1273	1273	121
15°	1214	1216	1237	1246	1250	342
25°	1104	1119	1152	1171	1182	508
35°	957	985	1035	1069	1084	599
45°	787	829	895	945	968	608
55°	606	658	738	803	830	541
65°	412	472	563	633	661	407
75°	212	279	366	428	445	225
85°	46	86	93	92	93	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1274.0	1274.0	1274.0	1274.0	1274.0
2.5°	1279.4	1270.1	1274.0	1274.0	1268.9
5°	1274.0	1266.2	1272.9	1272.9	1272.9
7.5°	1265.0	1258.3	1268.9	1271.5	1271.5
10°	1250.4	1247.9	1261.0	1265.0	1266.2
12.5°	1234.7	1233.3	1251.8	1256.9	1261.0
15°	1213.5	1216.2	1237.3	1246.5	1250.4
17.5°	1191.3	1196.4	1220.2	1233.3	1237.3
20°	1164.9	1172.8	1200.5	1213.5	1221.5
22.5°	1136.0	1147.8	1176.7	1192.5	1201.7
25°	1104.4	1118.7	1151.7	1171.4	1182.0
27.5°	1070.1	1088.6	1126.8	1149.0	1159.6
30°	1033.2	1054.2	1096.5	1122.8	1136.0
32.5°	995.1	1020.0	1066.2	1095.1	1110.9
35°	956.9	984.6	1034.6	1068.8	1084.5
37.5°	918.8	946.3	1001.7	1038.5	1058.3
40°	875.3	908.2	967.5	1008.2	1028.1
42.5°	833.2	868.6	931.9	976.6	997.8
45°	787.0	829.3	895.0	945.1	967.5
47.5°	745.0	787.0	858.2	910.9	935.9
50°	698.9	743.6	818.7	876.7	903.0
52.5°	654.1	700.3	779.2	841.1	867.4
55°	605.5	658.1	738.5	803.0	830.5
57.5°	556.8	613.4	696.2	763.4	791.1
60°	509.4	567.2	654.1	721.4	750.3
62.5°	462.0	519.8	610.7	679.1	706.8
65°	411.9	472.5	563.3	633.1	660.8
67.5°	362.0	425.1	515.9	585.7	612.1
70°	309.3	376.5	467.3	535.8	562.1
72.5°	260.7	327.7	417.2	484.4	509.4
75°	211.9	279.0	365.9	427.8	444.9
77.5°	164.6	231.6	309.3	350.2	354.1
80°	119.7	183.0	246.2	258.0	256.6
82.5°	80.2	136.8	169.9	171.1	175.0
85°	46.0	85.5	93.4	92.2	93.4
87.5°	18.5	30.3	26.3	19.7	19.7
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)