

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: P843071

Luminaire Tested: **24CZ2-45-HRP-UNV-B40**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P295011)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-HRP-UNV-B40
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Summary

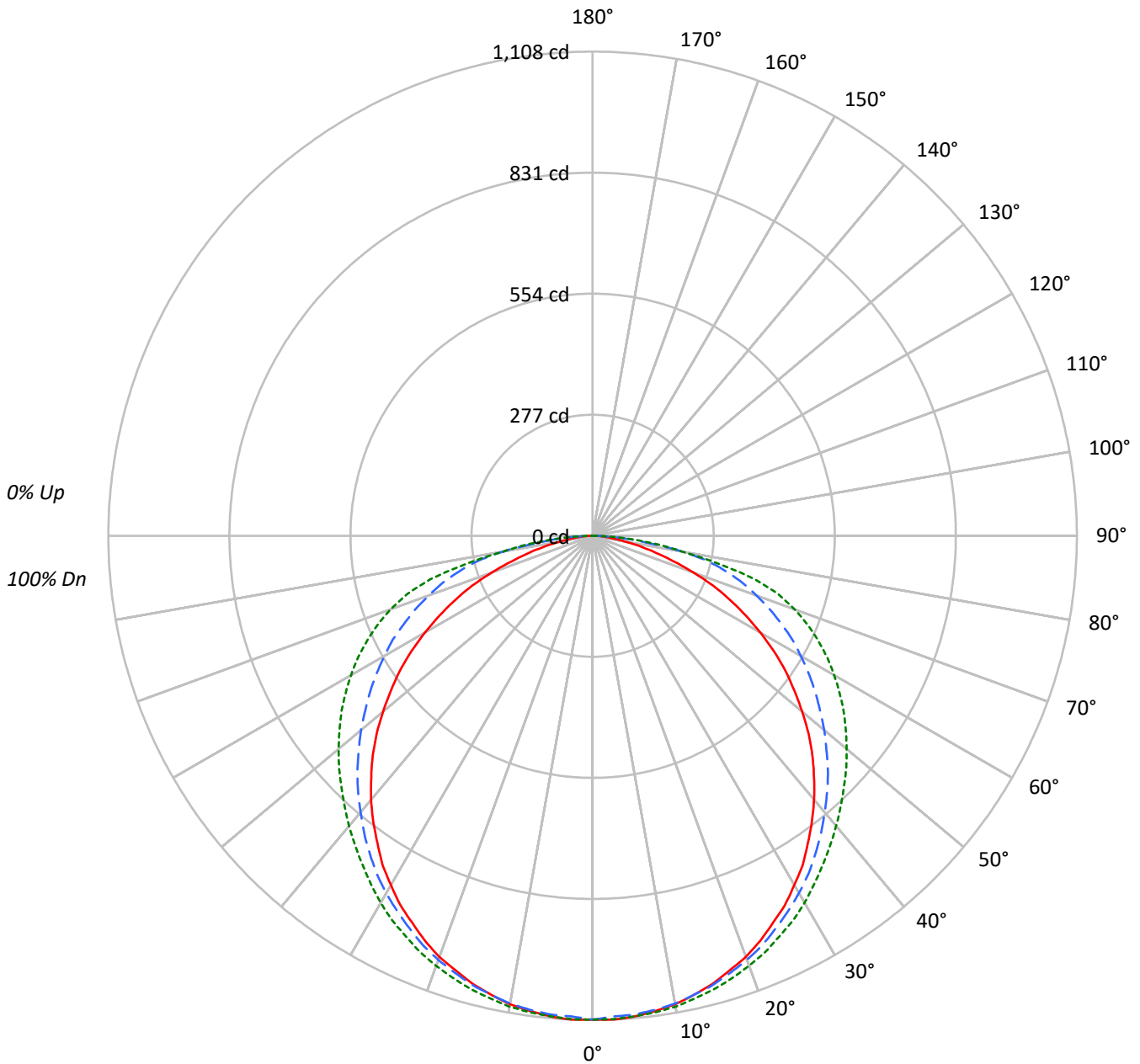
Lumens per Lamp: N/A
Luminaire Lumens: 3412.0 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 36
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

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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			100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82			82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67			67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56			56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	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	38	50	43	38	49	42	38	36			36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31			31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28			28
9	55	41	33	27	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	24	35	29	24	23			23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1562	1562	1562
5°	1564	1558	1564
10°	1560	1558	1568
15°	1551	1555	1570
20°	1540	1551	1573
25°	1522	1544	1575
30°	1504	1539	1580
35°	1479	1531	1582
40°	1453	1521	1597
45°	1420	1520	1622
50°	1374	1518	1665
55°	1325	1529	1726
60°	1250	1552	1802
65°	1154	1589	1903
70°	1008	1644	2028
75°	818	1729	2095
80°	603	1695	1695
85°	463	1250	1410



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	3.1
10°-20°	301.1	8.8
20°-30°	458.5	13.4
30°-40°	556.7	16.3
40°-50°	588.1	17.2
50°-60°	555.0	16.3
60°-70°	461.4	13.5
70°-80°	303.6	8.9
80°-90°	82.8	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°	864.5	25.3
0°-40°	1421.1	41.7
0°-60°	2564.2	75.2
0°-90°	3412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1104	1104	1100	1104	1104	105
15°	1061	1063	1064	1074	1074	299
25°	977	983	991	1008	1011	451
35°	858	868	889	911	918	537
45°	711	726	761	798	813	548
55°	538	561	621	680	701	480
65°	346	386	476	546	570	342
75°	150	218	317	376	384	162
85°	29	63	77	86	87	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1107.1	1107.1	1107.1	1107.1	1107.1
2.5°	1108.5	1107.1	1101.2	1107.1	1107.1
5°	1104.2	1104.2	1099.8	1104.2	1104.2
7.5°	1097.0	1097.0	1094.2	1099.8	1099.8
10°	1088.5	1088.5	1086.9	1094.2	1094.2
12.5°	1075.6	1077.0	1075.6	1084.1	1084.1
15°	1061.3	1062.7	1064.1	1074.2	1074.2
17.5°	1042.8	1045.6	1048.4	1059.9	1061.3
20°	1025.6	1027.0	1032.7	1045.6	1047.0
22.5°	1002.7	1007.1	1014.2	1027.0	1031.3
25°	977.1	982.7	991.4	1008.5	1011.3
27.5°	952.7	957.1	968.4	986.9	992.8
30°	922.8	929.9	944.2	962.7	969.8
32.5°	894.2	901.3	918.4	938.5	944.2
35°	858.5	868.4	888.6	911.3	918.4
37.5°	824.3	834.1	858.5	884.1	892.8
40°	788.4	799.9	825.7	855.7	867.0
42.5°	749.9	765.6	794.2	827.1	840.0
45°	711.4	725.7	761.4	798.5	812.8
47.5°	669.9	687.0	725.7	769.8	787.0
50°	625.7	647.1	691.4	740.0	758.5
52.5°	581.4	605.6	655.6	710.0	729.9
55°	538.4	561.4	621.3	679.9	701.3
57.5°	491.4	519.9	585.6	648.5	669.9
60°	442.9	474.3	549.9	615.6	638.4
62.5°	394.3	430.0	515.6	581.4	605.6
65°	345.7	385.6	475.7	545.7	569.9
67.5°	298.5	342.9	438.4	508.6	532.8
70°	244.3	300.0	398.5	467.1	491.4
72.5°	194.3	258.6	360.0	424.3	445.7
75°	150.0	218.5	317.1	375.7	384.2
77.5°	110.1	178.6	272.7	292.9	294.3
80°	74.2	142.9	208.6	205.6	208.6
82.5°	48.6	107.1	131.4	147.1	148.6
85°	28.6	62.9	77.2	85.7	87.1
87.5°	14.3	21.4	27.2	28.6	31.4
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)