

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: P843087

Luminaire Tested: **24CZ2-45HE-HRP-UNV-B50**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P843087
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: 24CZ2-45HE-HRP-UNV-B50
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

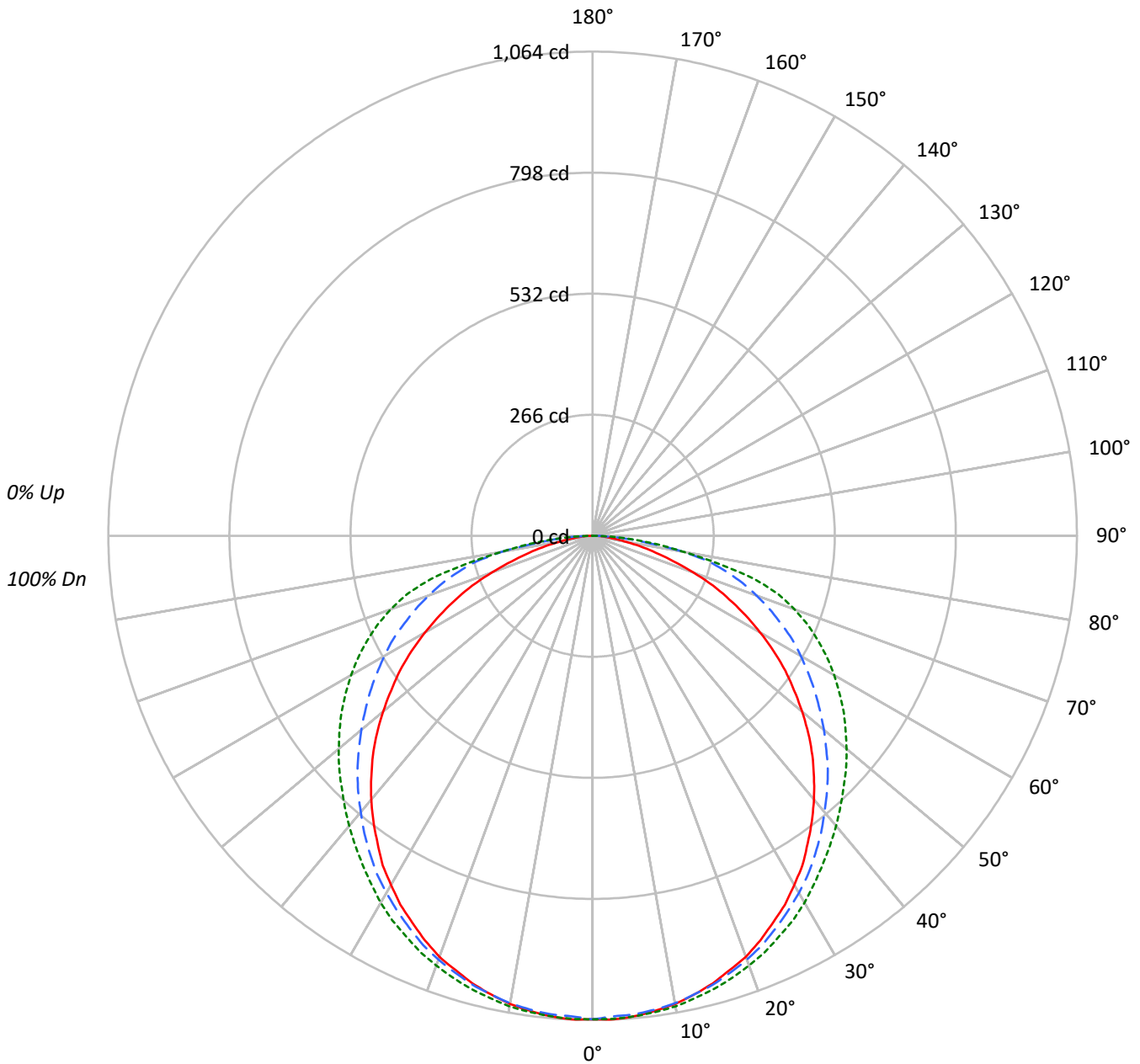
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3275.0 lumens
Efficiency: N/A
Efficacy: 99.2 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): 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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1500	1500	1500
5°	1502	1496	1502
10°	1497	1495	1505
15°	1488	1492	1507
20°	1479	1489	1509
25°	1460	1482	1512
30°	1444	1477	1517
35°	1420	1469	1519
40°	1394	1460	1533
45°	1363	1459	1557
50°	1319	1457	1599
55°	1272	1467	1656
60°	1200	1490	1730
65°	1108	1525	1827
70°	968	1578	1946
75°	785	1660	2011
80°	579	1627	1627
85°	445	1200	1354



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	3.1
10°-20°	289.1	8.8
20°-30°	440.0	13.4
30°-40°	534.3	16.3
40°-50°	564.5	17.2
50°-60°	532.7	16.3
60°-70°	442.9	13.5
70°-80°	291.4	8.9
80°-90°	79.4	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°	829.8	25.3
0°-40°	1364.1	41.7
0°-60°	2461.2	75.2
0°-90°	3275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3275.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1063	1063	1063	1063	1063	
5°	1060	1060	1056	1060	1060	101
15°	1019	1020	1021	1031	1031	287
25°	938	943	952	968	971	433
35°	824	834	853	875	882	516
45°	683	696	731	766	780	526
55°	517	539	596	653	673	460
65°	332	370	457	524	547	328
75°	144	210	304	361	369	155
85°	28	60	74	82	84	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1062.6	1062.6	1062.6	1062.6	1062.6
2.5°	1064.0	1062.6	1057.0	1062.6	1062.6
5°	1059.9	1059.9	1055.7	1059.9	1059.9
7.5°	1053.0	1053.0	1050.2	1055.7	1055.7
10°	1044.8	1044.8	1043.3	1050.2	1050.2
12.5°	1032.4	1033.8	1032.4	1040.6	1040.6
15°	1018.7	1020.1	1021.4	1031.1	1031.1
17.5°	1000.9	1003.6	1006.3	1017.3	1018.7
20°	984.5	985.8	991.2	1003.6	1005.0
22.5°	962.4	966.6	973.4	985.8	989.9
25°	937.8	943.2	951.6	968.0	970.7
27.5°	914.4	918.7	929.5	947.3	952.9
30°	885.8	892.6	906.3	924.1	930.9
32.5°	858.3	865.1	881.5	900.9	906.3
35°	824.0	833.5	852.9	874.7	881.5
37.5°	791.2	800.7	824.0	848.6	856.9
40°	756.7	767.8	792.5	821.3	832.2
42.5°	719.8	734.9	762.3	793.9	806.2
45°	682.8	696.5	730.8	766.4	780.1
47.5°	643.0	659.4	696.5	738.9	755.4
50°	600.6	621.1	663.6	710.3	728.1
52.5°	558.0	581.2	629.2	681.5	700.6
55°	516.8	538.9	596.3	652.6	673.1
57.5°	471.7	499.0	562.1	622.4	643.0
60°	425.1	455.3	527.8	590.9	612.8
62.5°	378.5	412.7	494.9	558.0	581.2
65°	331.8	370.1	456.6	523.8	547.0
67.5°	286.6	329.1	420.8	488.2	511.4
70°	234.5	287.9	382.5	448.3	471.7
72.5°	186.5	248.2	345.6	407.3	427.8
75°	144.0	209.7	304.4	360.6	368.8
77.5°	105.6	171.4	261.8	281.1	282.5
80°	71.2	137.2	200.2	197.4	200.2
82.5°	46.6	102.8	126.2	141.2	142.6
85°	27.5	60.4	74.1	82.2	83.6
87.5°	13.7	20.5	26.1	27.5	30.2
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)