

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: METALUX

Report Number: P600918

Luminaire Tested: UHBS-24-MV-L850-U 120V

Issue Date: 8/26/2022

Test Information

Test Method: LM-79-2019
Report Number: P600918
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ()
Test Lab: INNOVATION CENTER
Issue Date: 8/26/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: UHBS-24-MV-L850-U 120V
Description: UHB Round Select AT 24000 LUMEN SETTING AND 5000K
Light Source: -
Ballast/Driver: -

Summary

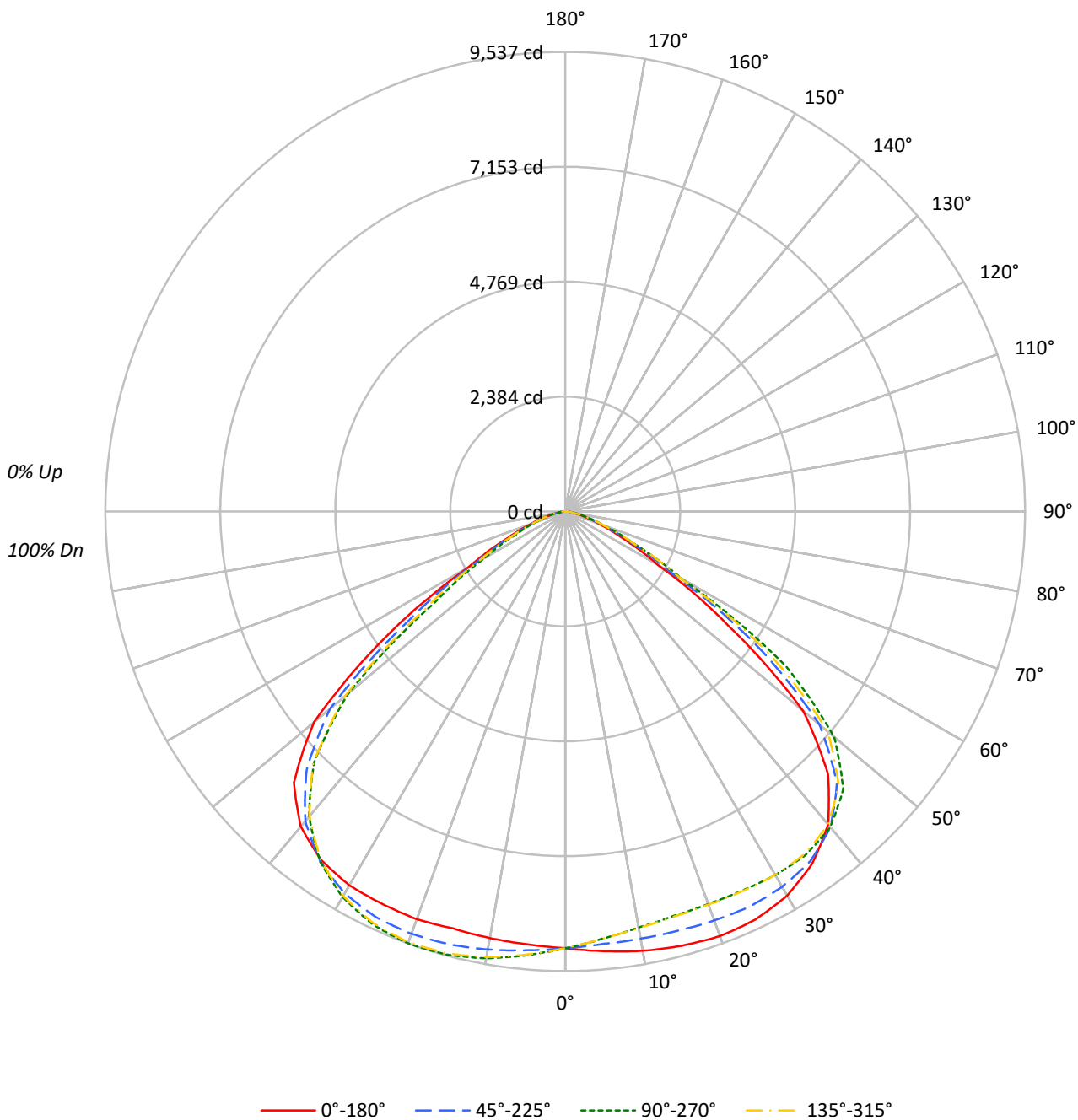
Lumens per Lamp: 24998 (1 lamp)
Luminaire Lumens: 24998.0 lumens
Efficiency: 100.0%
Efficacy: 162.5 lumens/watt
Spacing Criteria (0/90/45): 1.49 / 1.47 / 1.53
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 153.8
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: 24 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	101	99	100	98	95	97	94	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	70206	70206	70206	70206
5°	71232	69219	70108	71899
10°	72837	68966	70719	74069
15°	74836	69689	71869	76350
20°	77315	71469	74237	78633
25°	79872	74212	76801	80814
30°	82337	77937	80129	82632
35°	84428	82281	83469	83846
40°	85791	86478	86294	83564
45°	84430	89345	87187	80694
50°	77677	87764	81947	70831
55°	55641	75335	61507	44876
60°	34729	43002	35840	29606
65°	23880	28396	24538	20685
70°	16842	19728	16953	14570
75°	11998	13803	11687	10196
80°	8638	9499	7893	6586
85°	6329	5565	4187	6036

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 89345 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	867.0	3.5	3.5
10°-20°	2586.5	10.3	10.3
20°-30°	4209.3	16.8	16.8
30°-40°	5503.1	22.0	22.0
40°-50°	5895.3	23.6	23.6
50°-60°	3949.8	15.8	15.8
60°-70°	1433.5	5.7	5.7
70°-80°	456.3	1.8	1.8
80°-90°	97.2	0.4	0.4
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	7662.8	30.7	30.7
0°-40°	13165.9	52.7	52.7
0°-60°	23011.0	92.1	92.1
0°-90°	24998.0	100.0	100.0
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	24998.0	100.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	9061	9061	9061	9061	9061	
5°	9159	8900	9014	9245	9159	877
15°	9330	8688	8960	9519	9330	2644
25°	9343	8681	8984	9453	9343	4310
35°	8926	8699	8825	8865	8926	5574
45°	7706	8154	7957	7365	7706	5857
55°	4119	5577	4553	3322	4119	3767
65°	1303	1549	1338	1128	1303	1380
75°	401	461	390	341	401	458
85°	71	63	47	68	71	110
90°	66	39	39	67	66	



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	9061.4	9061.4	9061.4	9061.4	9061.4	9061.4	9061.4	9061.4	9061.4	9061.4	9061.4
5°	9158.9	9055.7	8960.3	8900.1	8879.8	8913.1	9014.4	9100.0	9183.1	9244.6	9248.5
10°	9258.2	9093.2	8910.7	8766.2	8742.8	8810.0	8989.0	9146.9	9314.9	9414.8	9413.2
15°	9329.9	9140.6	8873.9	8688.2	8645.6	8760.2	8960.0	9201.3	9395.3	9518.6	9522.4
20°	9377.2	9170.9	8897.8	8668.2	8622.4	8740.5	9003.9	9230.1	9418.6	9537.0	9542.9
25°	9343.1	9185.4	8906.5	8681.1	8638.1	8746.9	8983.9	9220.0	9357.7	9453.3	9458.7
30°	9203.4	9106.5	8885.8	8711.6	8658.0	8761.0	8956.6	9112.6	9184.4	9236.4	9221.9
35°	8926.3	8932.5	8784.9	8699.4	8643.9	8696.0	8825.0	8865.0	8852.7	8864.8	8834.5
40°	8482.4	8569.4	8545.2	8550.3	8479.2	8478.3	8532.1	8446.8	8327.3	8262.2	8230.8
45°	7705.6	7919.5	8020.5	8154.1	8046.8	7987.7	7957.2	7699.3	7470.3	7364.6	7341.6
50°	6444.4	6780.6	6986.8	7281.3	7148.7	7056.5	6798.7	6508.7	6208.6	5876.4	5850.9
55°	4119.2	4632.5	5063.7	5577.1	5312.7	5094.8	4553.4	4255.6	3729.2	3322.2	3436.9
60°	2241.2	2400.1	2657.3	2775.1	2796.4	2668.1	2312.9	2187.7	2130.0	1910.6	2024.1
65°	1302.6	1379.4	1536.6	1548.9	1613.0	1478.7	1338.5	1236.7	1219.4	1128.3	1202.5
70°	743.5	782.5	861.4	870.9	894.0	823.5	748.4	678.7	667.7	643.2	676.0
75°	400.8	425.2	454.0	461.1	460.9	430.2	390.4	345.8	337.0	340.6	350.9
80°	193.6	207.5	218.4	212.9	207.1	198.9	176.9	152.5	139.9	147.6	150.1
85°	71.2	74.2	77.4	62.6	58.2	53.2	47.1	44.7	43.0	67.9	68.3
90°	66.1	66.4	66.3	39.0	39.2	39.4	39.2	39.1	39.2	66.6	66.4



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	9061.4	9061.4
5°	9215.2	9158.9
10°	9363.8	9258.2
15°	9461.7	9329.9
20°	9478.7	9377.2
25°	9389.9	9343.1
30°	9197.5	9203.4
35°	8832.4	8926.3
40°	8268.1	8482.4
45°	7432.6	7705.6
50°	6044.5	6444.4
55°	3738.2	4119.2
60°	2114.6	2241.2
65°	1219.9	1302.6
70°	692.8	743.5
75°	367.3	400.8
80°	169.0	193.6
85°	69.3	71.2
90°	66.2	66.1

(END OF REPORT)