

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: P600931

Luminaire Tested: UHBS-24-MV-L850-U 347V

Issue Date: 8/26/2022

Test Information

Test Method: LM-79-2019
Report Number: P600931
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 347V
Description: UHB Round Select AT 24000 LUMEN SETTING AND 5000K
Light Source: -
Ballast/Driver: -

Summary

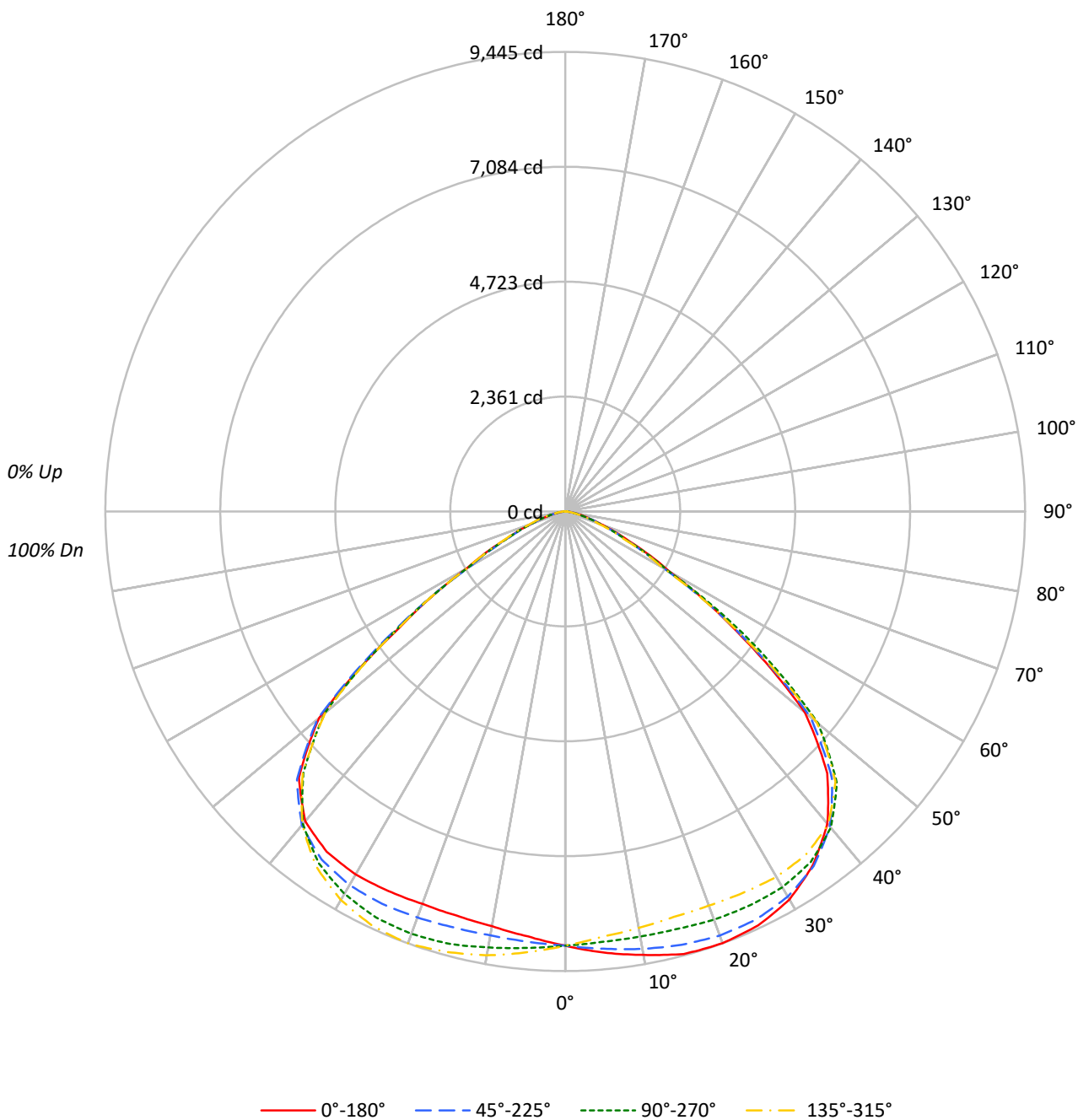
Lumens per Lamp: 24827 (1 lamp)
Luminaire Lumens: 24827.0 lumens
Efficiency: 100.0%
Efficacy: 165.1 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.49 / 1.54
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 150.4
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	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	100	100	
1	111	107	103	100	108	105	101	99	100	98	95	97	94	93	93	91	90	88	88	88	88	
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76	76	76	76	
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66	66	66	66	
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57	57	57	57	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50	50	50	50	
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44	44	44	44	
7	68	56	47	41	67	55	47	41	53	46	41	52	46	41	51	45	40	39	39	39	39	
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34	34	34	34	
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31	31	31	31	
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28	28	28	28	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	69141	69141	69141	69141
5°	70782	69044	68186	70020
10°	72808	69781	68091	71575
15°	75526	71237	68977	73796
20°	77848	73600	70763	76139
25°	80220	76423	73560	78685
30°	82391	79785	77057	81151
35°	83912	83159	80744	83466
40°	84721	85808	84013	84764
45°	83409	86440	84746	83324
50°	77482	81762	79511	77705
55°	58127	62897	55963	56980
60°	38364	37530	36044	35539
65°	26744	25131	24509	23921
70°	18652	17194	16190	16292
75°	13118	11815	10639	11444
80°	9477	7888	6617	8169
85°	6667	4134	3903	6418

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 86440 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	854.5	3.4	3.4
10°-20°	2556.7	10.3	10.3
20°-30°	4176.6	16.8	16.8
30°-40°	5479.9	22.1	22.1
40°-50°	5884.3	23.7	23.7
50°-60°	3906.0	15.7	15.7
60°-70°	1420.3	5.7	5.7
70°-80°	452.6	1.8	1.8
80°-90°	96.0	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°	7587.9	30.6	30.6
0°-40°	13067.7	52.6	52.6
0°-60°	22858.1	92.1	92.1
0°-90°	24827.0	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°	24827.0	100.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	8924	8924	8924	8924	8924	
5°	9101	8878	8767	9003	9101	872
15°	9416	8881	8599	9200	9416	2662
25°	9384	8940	8605	9204	9384	4327
35°	8872	8792	8537	8825	8872	5540
45°	7612	7889	7734	7605	7612	5798
55°	4303	4656	4143	4218	4303	3900
65°	1459	1371	1337	1305	1459	1534
75°	438	395	355	382	438	504
85°	75	46	44	72	75	117
90°	66	39	38	66	66	



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	8924.0	8924.0	8924.0	8924.0	8924.0	8924.0	8924.0	8924.0	8924.0	8924.0	8924.0
5°	9101.0	9063.3	8978.0	8877.6	8798.1	8745.0	8767.2	8840.4	8907.0	9003.1	9086.6
10°	9254.5	9200.2	9054.8	8869.7	8732.0	8648.1	8654.9	8764.1	8925.8	9097.8	9242.1
15°	9415.9	9316.5	9123.8	8881.2	8687.5	8560.0	8599.4	8741.7	8956.6	9200.2	9348.5
20°	9441.8	9370.4	9177.5	8926.6	8686.5	8552.8	8582.5	8760.1	8996.6	9234.5	9413.2
25°	9383.9	9334.2	9178.2	8939.7	8718.4	8574.2	8604.8	8787.9	9005.2	9204.3	9360.8
30°	9209.4	9179.3	9098.1	8918.1	8728.7	8611.8	8613.2	8778.0	8945.8	9070.8	9202.9
35°	8871.8	8909.5	8883.2	8792.2	8653.5	8575.5	8536.9	8674.5	8779.8	8824.6	8903.5
40°	8376.6	8429.2	8484.6	8484.1	8422.4	8378.2	8306.6	8386.8	8439.3	8380.9	8395.5
45°	7612.4	7699.7	7798.2	7889.0	7870.6	7830.3	7734.4	7804.8	7775.2	7604.6	7615.6
50°	6428.2	6537.8	6603.4	6783.3	6767.4	6739.9	6596.6	6684.3	6602.4	6446.7	6442.4
55°	4303.2	4386.6	4373.8	4656.3	4432.3	4346.2	4143.0	4264.4	4350.2	4218.3	4181.7
60°	2475.8	2379.1	2307.6	2422.0	2356.3	2269.1	2326.1	2224.4	2191.9	2293.5	2286.1
65°	1458.8	1388.4	1355.9	1370.8	1345.0	1287.8	1336.9	1271.6	1266.4	1304.8	1356.6
70°	823.4	789.2	773.6	759.0	735.7	706.7	714.7	699.8	697.8	719.2	778.8
75°	438.2	433.3	416.0	394.7	372.1	358.0	355.4	363.6	366.7	382.3	414.6
80°	212.4	215.0	204.3	176.8	159.0	151.8	148.3	159.9	162.1	183.1	199.8
85°	75.0	73.8	72.4	46.5	44.9	44.3	43.9	44.2	45.0	72.2	74.2
90°	65.8	65.9	65.5	38.7	38.3	38.2	38.2	38.3	38.3	65.6	65.9



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	8924.0	8924.0
5°	9104.8	9101.0
10°	9282.3	9254.5
15°	9392.5	9415.9
20°	9477.4	9441.8
25°	9415.0	9383.9
30°	9231.9	9209.4
35°	8920.5	8871.8
40°	8404.6	8376.6
45°	7630.1	7612.4
50°	6412.3	6428.2
55°	4171.0	4303.2
60°	2315.7	2475.8
65°	1373.8	1458.8
70°	786.9	823.4
75°	430.8	438.2
80°	208.1	212.4
85°	74.9	75.0
90°	66.0	65.8

(END OF REPORT)