

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: P600924

Luminaire Tested: UHBS-24-MV-L840-U 277V

Issue Date: 8/26/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600924  
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-L840-U 277V  
Description: UHB Round Select AT 24000 LUMEN SETTING AND 4000K  
Light Source: -  
Ballast/Driver: -

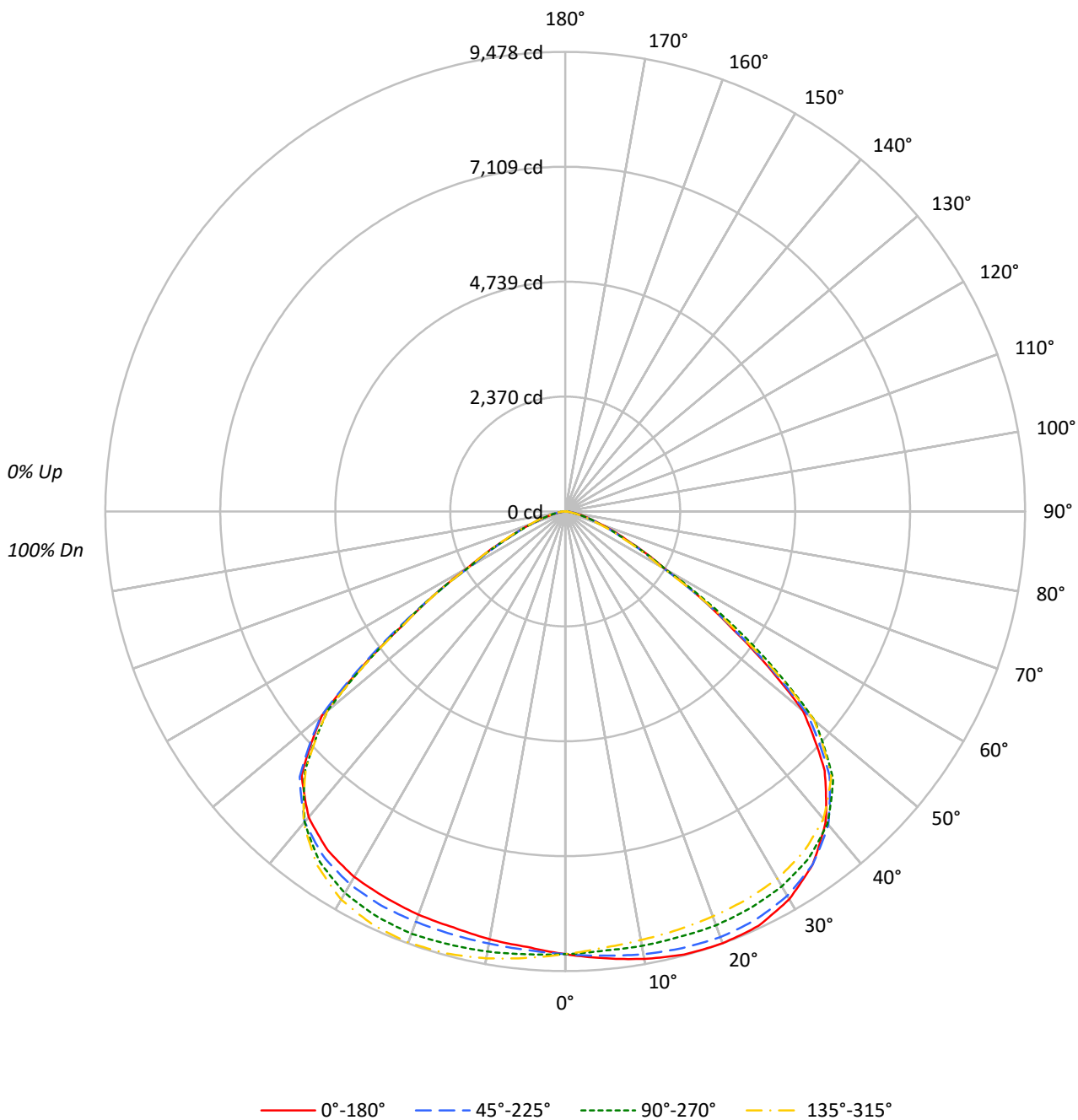
**Summary**

Lumens per Lamp: 24765 (1 lamp)  
Luminaire Lumens: 24765.0 lumens  
Efficiency: 100.0%  
Efficacy: 165.3 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 1.46 / 1.52  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 149.8  
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	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	96	97	95	93	93	91	90	88	88	88	88	
2	102	95	89	84	100	93	88	83	90	85	82	87	83	80	84	81	78	76	76	76	76	
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66	66	66	66	
4	87	76	68	62	84	75	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50	50	50	50	
6	74	61	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44	44	44	44	
7	69	56	48	42	67	55	47	42	54	46	41	52	46	41	51	45	41	39	39	39	39	
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35	35	35	35	
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31	31	31	31	
10	56	43	35	30	54	42	35	30	41	35	30	41	34	30	40	34	30	28	28	28	28	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	70733	70733	70733	70733
5°	71934	70706	70100	71294
10°	73714	71576	70485	72514
15°	75871	72868	71247	74130
20°	78145	74889	72949	76401
25°	80606	77165	75074	78728
30°	82604	79851	77833	81277
35°	84088	82653	80692	83431
40°	84518	85049	83202	84543
45°	82833	85556	84151	83177
50°	77062	80949	78815	76995
55°	56646	61389	54950	55456
60°	36923	36991	35648	34893
65°	25899	24817	24042	23294
70°	18172	16847	15875	15796
75°	12728	11597	10447	11034
80°	9214	7763	6612	7973
85°	6632	4107	3831	6329

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 85556 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	872.9	3.5	3.5
10°-20°	2599.9	10.5	10.5
20°-30°	4210.9	17.0	17.0
30°-40°	5469.2	22.1	22.1
40°-50°	5841.6	23.6	23.6
50°-60°	3842.2	15.5	15.5
60°-70°	1393.9	5.6	5.6
70°-80°	440.1	1.8	1.8
80°-90°	94.4	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°	7683.6	31.0	31.0
0°-40°	13152.8	53.1	53.1
0°-60°	22836.6	92.2	92.2
0°-90°	24765.0	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°	24765.0	100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	9129	9129	9129	9129	9129	
5°	9249	9091	9013	9167	9249	886
15°	9459	9085	8882	9242	9459	2678
25°	9429	9026	8782	9209	9429	4345
35°	8890	8739	8531	8821	8890	5546
45°	7560	7808	7680	7591	7560	5766
55°	4194	4545	4068	4106	4194	3822
65°	1413	1354	1311	1271	1413	1484
75°	425	387	349	369	425	490
85°	75	46	43	71	75	115
90°	65	38	38	65	65	



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**CANDELA DISTRIBUTION (FULL):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	9129.4	9129.4	9129.4	9129.4	9129.4	9129.4	9129.4	9129.4	9129.4	9129.4	9129.4
5°	9249.2	9220.1	9171.5	9091.2	9050.2	9013.0	9013.3	9047.6	9105.7	9166.9	9226.5
10°	9369.7	9317.1	9225.4	9097.9	9001.5	8947.1	8959.2	8993.7	9104.4	9217.2	9325.3
15°	9459.0	9382.9	9262.2	9084.6	8973.5	8892.4	8882.5	8956.9	9097.7	9241.9	9398.0
20°	9477.8	9407.9	9278.2	9083.0	8933.7	8843.1	8847.7	8921.1	9087.3	9266.3	9419.3
25°	9429.0	9348.4	9231.3	9026.5	8873.9	8789.6	8781.9	8886.5	9046.3	9209.3	9361.6
30°	9233.2	9200.9	9108.6	8925.5	8766.5	8721.6	8700.0	8799.5	8950.4	9084.9	9232.0
35°	8890.4	8903.7	8872.7	8738.7	8607.9	8528.2	8531.3	8630.6	8741.8	8820.9	8907.7
40°	8356.5	8404.6	8470.0	8409.0	8302.1	8250.2	8226.4	8319.0	8385.2	8359.0	8390.5
45°	7559.8	7641.3	7772.2	7808.3	7764.9	7744.6	7680.1	7741.6	7734.1	7591.2	7578.4
50°	6393.4	6491.2	6557.3	6715.9	6703.0	6698.1	6538.8	6590.0	6552.8	6387.8	6412.3
55°	4193.6	4268.5	4262.9	4544.7	4356.0	4296.9	4068.0	4175.6	4259.5	4105.5	4070.2
60°	2382.8	2335.1	2285.5	2387.2	2328.0	2223.1	2300.5	2202.9	2174.1	2251.8	2270.0
65°	1412.7	1349.5	1332.6	1353.7	1324.5	1260.7	1311.4	1260.9	1249.7	1270.6	1330.2
70°	802.2	761.1	748.8	743.7	717.7	689.1	700.8	692.3	695.8	697.3	754.4
75°	425.2	408.7	402.6	387.4	362.5	345.9	349.0	353.5	357.4	368.6	401.8
80°	206.5	205.7	197.3	174.0	157.0	148.7	148.2	157.5	160.6	178.7	193.4
85°	74.6	73.3	72.1	46.2	44.5	43.9	43.1	43.5	44.3	71.2	73.6
90°	65.4	65.4	65.1	38.1	37.8	37.7	37.7	37.7	37.8	65.0	65.3



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**CANDELA DISTRIBUTION (continued):**

	330°	360°
0°	9129.4	9129.4
5°	9260.2	9249.2
10°	9389.3	9369.7
15°	9474.9	9459.0
20°	9495.3	9477.8
25°	9435.9	9429.0
30°	9246.0	9233.2
35°	8908.7	8890.4
40°	8371.5	8356.5
45°	7554.2	7559.8
50°	6385.5	6393.4
55°	4040.1	4193.6
60°	2274.4	2382.8
65°	1345.5	1412.7
70°	761.9	802.2
75°	413.3	425.2
80°	203.4	206.5
85°	74.4	74.6
90°	65.4	65.4

(END OF REPORT)