

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: P600917

Luminaire Tested: UHBS-24-MV-L840-U 120V

Issue Date: 8/26/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600917  
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 120V  
Description: UHB Round Select AT 24000 LUMEN SETTING AND 4000K  
Light Source: -  
Ballast/Driver: -

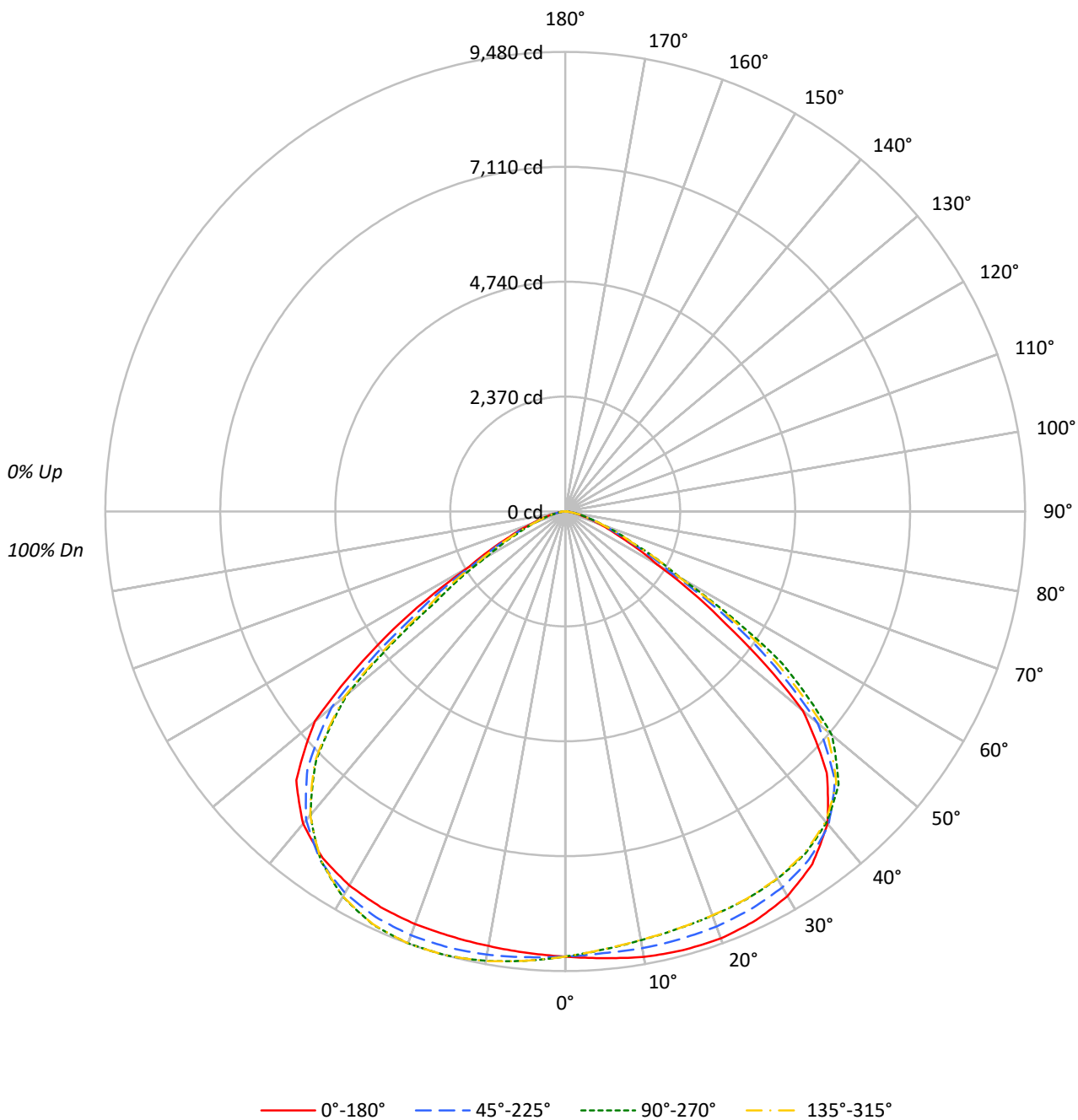
**Summary**

Lumens per Lamp: 24825 (1 lamp)  
Luminaire Lumens: 24825.0 lumens  
Efficiency: 100.0%  
Efficacy: 162.5 lumens/watt  
Spacing Criteria (0/90/45): 1.46 / 1.45 / 1.51  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 152.8  
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	95	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	82	87	83	80	84	81	78	76
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	84	74	67	61	72	66	61	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	61	53	47	59	52	47	57	51	46	56	50	46	44
7	68	56	48	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	59	47	39	33	58	46	38	33	45	38	33	44	38	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	41	34	30	40	34	30	28

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

	0°	90°	180°	270°
0°	71128	71128	71128	71128
5°	71921	70535	71063	72353
10°	73403	70665	71600	74052
15°	75136	71510	72787	76038
20°	77281	73141	74656	78154
25°	79527	75464	76959	80315
30°	81949	78269	79646	82068
35°	83989	81552	82494	83102
40°	85047	84731	85025	82636
45°	83560	87314	85889	79585
50°	77057	86518	81175	70678
55°	54477	73728	61250	44126
60°	33802	42383	35488	28941
65°	23418	28183	24203	20206
70°	16285	19425	16596	14056
75°	11471	13426	11366	9801
80°	8294	9240	7750	6554
85°	6249	5547	4116	5938

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 87314 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	877.5	3.5	3.5
10°-20°	2608.7	10.5	10.5
20°-30°	4213.6	17.0	17.0
30°-40°	5457.9	22.0	22.0
40°-50°	5822.7	23.5	23.5
50°-60°	3895.3	15.7	15.7
60°-70°	1409.5	5.7	5.7
70°-80°	444.2	1.8	1.8
80°-90°	95.6	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°	7699.8	31.0	31.0
0°-40°	13157.7	53.0	53.0
0°-60°	22875.7	92.1	92.1
0°-90°	24825.0	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°	24825.0	100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	9180	9180	9180	9180	9180	
5°	9248	9069	9137	9303	9248	885
15°	9367	8915	9074	9480	9367	2654
25°	9303	8828	9002	9395	9303	4295
35°	8880	8622	8722	8786	8880	5541
45°	7626	7969	7839	7263	7626	5802
55°	4033	5458	4534	3267	4033	3703
65°	1277	1537	1320	1102	1277	1346
75°	383	448	380	327	383	440
85°	70	62	46	67	70	107
90°	66	38	39	66	66	



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**CANDELA DISTRIBUTION (FULL):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	9180.4	9180.4	9180.4	9180.4	9180.4	9180.4	9180.4	9180.4	9180.4	9180.4	9180.4
5°	9247.5	9178.4	9108.9	9069.2	9047.8	9079.3	9137.1	9201.6	9255.6	9303.0	9309.4
10°	9330.1	9219.1	9077.2	8982.1	8947.0	8996.6	9101.0	9226.9	9336.3	9412.6	9431.5
15°	9367.3	9216.2	9049.5	8915.2	8883.1	8945.6	9074.4	9239.3	9379.1	9479.7	9501.2
20°	9373.1	9216.6	9005.5	8871.0	8830.1	8901.3	9054.7	9220.2	9379.4	9478.9	9499.4
25°	9302.8	9151.2	8950.8	8827.5	8785.6	8858.1	9002.4	9166.8	9299.6	9395.0	9400.5
30°	9160.0	9039.6	8864.1	8748.7	8708.7	8772.5	8902.6	9026.2	9135.5	9173.3	9164.5
35°	8879.9	8844.5	8686.1	8622.3	8572.1	8622.1	8721.9	8788.9	8798.4	8786.2	8759.9
40°	8408.8	8485.8	8398.0	8377.6	8334.9	8364.0	8406.7	8361.6	8253.7	8170.5	8135.0
45°	7626.2	7838.2	7888.7	7968.8	7913.9	7891.8	7838.7	7630.5	7403.3	7263.4	7243.8
50°	6393.0	6690.6	6894.8	7177.9	7075.5	6966.0	6734.6	6434.5	6130.4	5863.7	5829.1
55°	4033.0	4561.1	4972.5	5458.2	5211.6	5025.1	4534.4	4192.6	3668.2	3266.7	3373.2
60°	2181.4	2356.0	2636.4	2735.2	2788.7	2628.5	2290.2	2182.6	2098.5	1867.7	1995.6
65°	1277.4	1351.4	1518.2	1537.3	1584.5	1462.2	1320.2	1220.0	1190.1	1102.2	1175.1
70°	718.9	766.9	846.2	857.5	872.7	810.8	732.6	664.0	648.9	620.5	654.3
75°	383.2	415.0	445.0	448.5	446.4	424.5	379.7	336.8	322.8	327.4	339.4
80°	185.9	205.3	214.2	207.1	200.3	197.4	173.7	147.3	136.2	146.9	149.2
85°	70.3	73.5	78.1	62.4	58.6	52.9	46.3	43.6	42.1	66.8	67.3
90°	65.5	65.6	65.5	38.3	38.5	38.8	38.6	38.5	38.6	65.8	65.6

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**CANDELA DISTRIBUTION (continued):**

	330°	360°
0°	9180.4	9180.4
5°	9294.3	9247.5
10°	9399.0	9330.1
15°	9458.3	9367.3
20°	9461.1	9373.1
25°	9375.7	9302.8
30°	9164.7	9160.0
35°	8797.6	8879.9
40°	8214.9	8408.8
45°	7355.2	7626.2
50°	6011.3	6393.0
55°	3657.7	4033.0
60°	2073.1	2181.4
65°	1188.4	1277.4
70°	666.2	718.9
75°	354.1	383.2
80°	163.3	185.9
85°	68.4	70.3
90°	65.6	65.5

(END OF REPORT)