

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: P600920

Luminaire Tested: UHBS-30-MV-L840-U 120V

Issue Date: 8/26/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P600920  
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-30-MV-L840-U 120V  
Description: UHB Round Select AT 30000 LUMEN SETTING AND 4000K  
Light Source: -  
Ballast/Driver: -

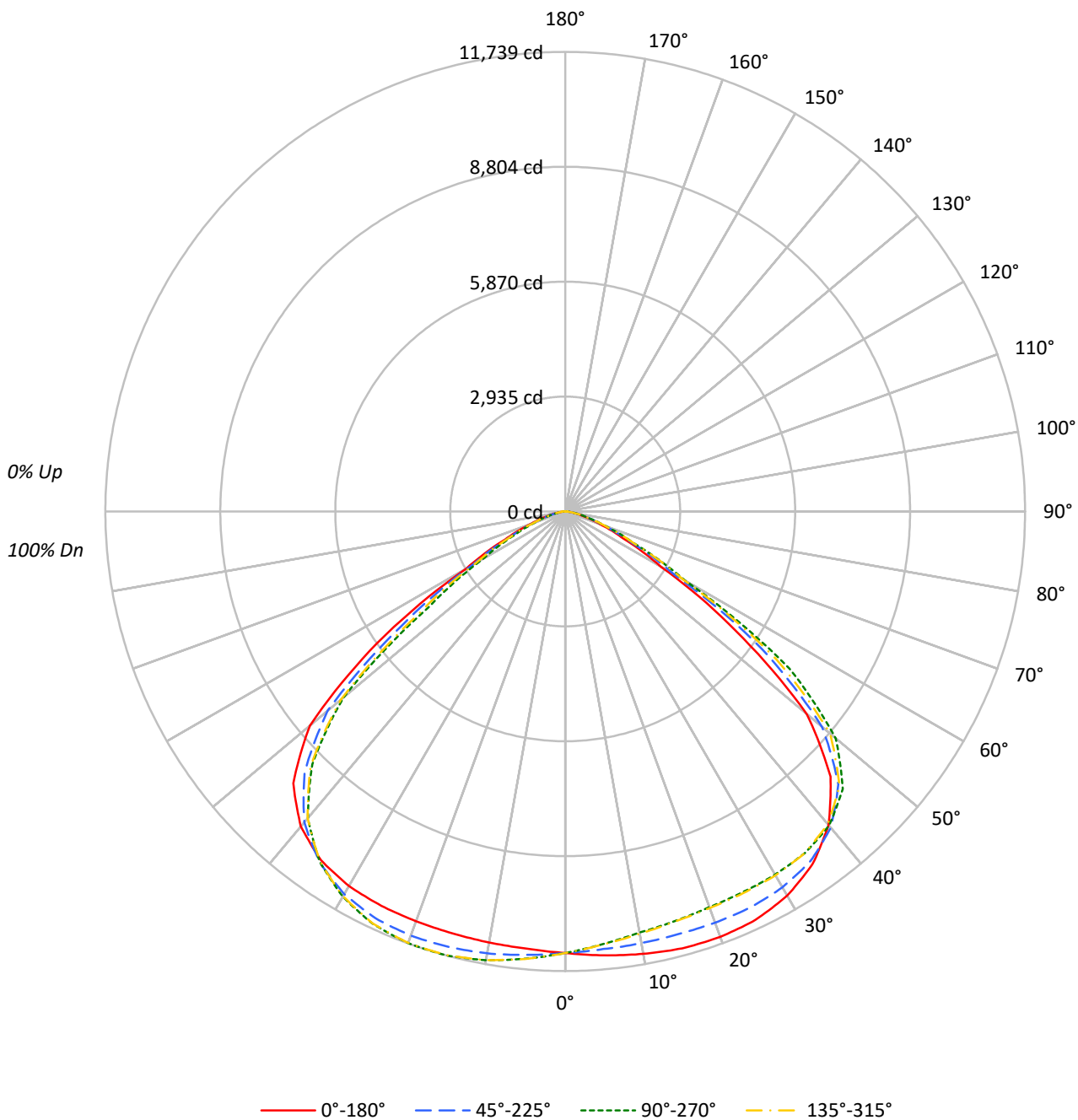
**Summary**

Lumens per Lamp: 31056 (1 lamp)  
Luminaire Lumens: 31056.0 lumens  
Efficiency: 100.0%  
Efficacy: 153.5 lumens/watt  
Spacing Criteria (0/90/45): 1.47 / 1.46 / 1.52  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 202.3  
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	98	100	98	95	97	94	92	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	81	78	76
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	61	53	47	72	60	52	47	58	51	46	57	51	46	55	50	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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

	0°	90°	180°	270°
0°	87380	87380	87380	87380
5°	88520	86260	87162	89182
10°	90275	85907	87958	91571
15°	92660	86856	89458	94160
20°	95359	88686	91820	96735
25°	98381	91712	94995	99364
30°	101391	95839	98817	101624
35°	104085	100788	102835	103320
40°	105805	105963	106198	103344
45°	104978	109803	107551	100084
50°	97032	108701	102520	89010
55°	71605	94331	79225	57148
60°	43778	54949	45191	37549
65°	30163	35941	30982	26227
70°	21133	24927	21384	18390
75°	15048	17222	14728	12767
80°	10753	11833	9865	8169
85°	7849	6827	5192	7503

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 109803 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	1078.2	3.5	3.5
10°-20°	3206.0	10.3	10.3
20°-30°	5194.7	16.7	16.7
30°-40°	6781.0	21.8	21.8
40°-50°	7303.1	23.5	23.5
50°-60°	4984.7	16.1	16.1
60°-70°	1813.6	5.8	5.8
70°-80°	573.7	1.8	1.8
80°-90°	121.0	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°	9478.8	30.5	30.5
0°-40°	16259.9	52.4	52.4
0°-60°	28547.7	91.9	91.9
0°-90°	31056.0	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°	31056.0	100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	11278	11278	11278	11278	11278	
5°	11382	11091	11207	11467	11382	1089
15°	11552	10828	11153	11739	11552	3271
25°	11508	10728	11112	11623	11508	5311
35°	11005	10656	10872	10924	11005	6871
45°	9581	10021	9816	9134	9581	7274
55°	5301	6983	5865	4231	5301	4781
65°	1645	1960	1690	1431	1645	1740
75°	503	575	492	426	503	574
85°	88	77	58	84	88	136
90°	82	49	49	83	82	



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**CANDELA DISTRIBUTION (FULL):**

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	11278.1	11278.1	11278.1	11278.1	11278.1	11278.1	11278.1	11278.1	11278.1	11278.1	11278.1
5°	11381.7	11276.5	11162.8	11091.1	11074.6	11123.4	11207.1	11322.9	11417.8	11466.8	11488.8
10°	11474.7	11293.5	11099.3	10919.5	10902.1	11000.3	11180.2	11376.6	11546.9	11639.4	11663.2
15°	11552.1	11300.4	11044.7	10828.4	10772.9	10909.8	11152.8	11411.1	11619.5	11739.1	11756.2
20°	11565.7	11334.5	11024.3	10756.3	10703.9	10855.2	11136.4	11416.7	11642.2	11732.6	11753.0
25°	11508.3	11308.6	11022.6	10728.2	10673.0	10840.0	11112.2	11364.4	11563.2	11623.2	11636.4
30°	11333.2	11210.9	10962.7	10712.6	10667.7	10802.7	11045.5	11211.4	11353.9	11359.2	11358.0
35°	11004.6	10991.8	10828.0	10656.1	10609.2	10698.4	10872.5	10921.3	10941.6	10923.8	10901.4
40°	10461.2	10571.4	10521.2	10476.9	10413.5	10433.3	10500.1	10426.3	10299.8	10217.9	10188.1
45°	9580.9	9811.2	9909.4	10021.3	9920.2	9876.1	9815.7	9540.0	9273.8	9134.2	9126.0
50°	8050.2	8424.4	8705.2	9018.3	8878.5	8770.6	8505.5	8094.5	7729.7	7384.6	7353.3
55°	5301.0	5899.9	6392.7	6983.4	6691.4	6453.7	5865.1	5427.7	4782.8	4230.7	4373.3
60°	2825.2	3039.5	3354.4	3546.1	3543.0	3399.9	2916.4	2784.1	2688.4	2423.2	2563.0
65°	1645.3	1737.3	1935.4	1960.5	2036.9	1875.3	1690.0	1562.4	1550.0	1430.6	1522.3
70°	932.9	983.1	1084.6	1100.4	1126.4	1039.5	944.0	856.7	843.5	811.8	851.5
75°	502.7	531.6	574.2	575.3	578.4	541.8	492.0	436.2	425.4	426.5	439.9
80°	241.0	258.3	274.5	265.2	259.1	248.5	221.1	189.7	174.5	183.1	187.3
85°	88.3	92.0	95.7	76.8	71.6	65.7	58.4	55.6	53.5	84.4	85.0
90°	82.5	82.8	82.8	48.8	49.1	49.4	49.1	48.9	49.1	82.9	82.7



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**CANDELA DISTRIBUTION (continued):**

	330°	360°
0°	11278.1	11278.1
5°	11451.3	11381.7
10°	11608.2	11474.7
15°	11701.0	11552.1
20°	11696.8	11565.7
25°	11587.6	11508.3
30°	11337.3	11333.2
35°	10917.7	11004.6
40°	10266.8	10461.2
45°	9247.8	9580.9
50°	7588.0	8050.2
55°	4773.8	5301.0
60°	2675.7	2825.2
65°	1548.0	1645.3
70°	873.7	932.9
75°	461.1	502.7
80°	211.2	241.0
85°	86.2	88.3
90°	82.6	82.5

(END OF REPORT)