

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: P600930

Luminaire Tested: UHBS-24-MV-L840-U 347V

Issue Date: 8/26/2022

Test Information

Test Method: LM-79-2019
Report Number: P600930
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 347V
Description: UHB Round Select AT 24000 LUMEN SETTING AND 4000K
Light Source: -
Ballast/Driver: -

Summary

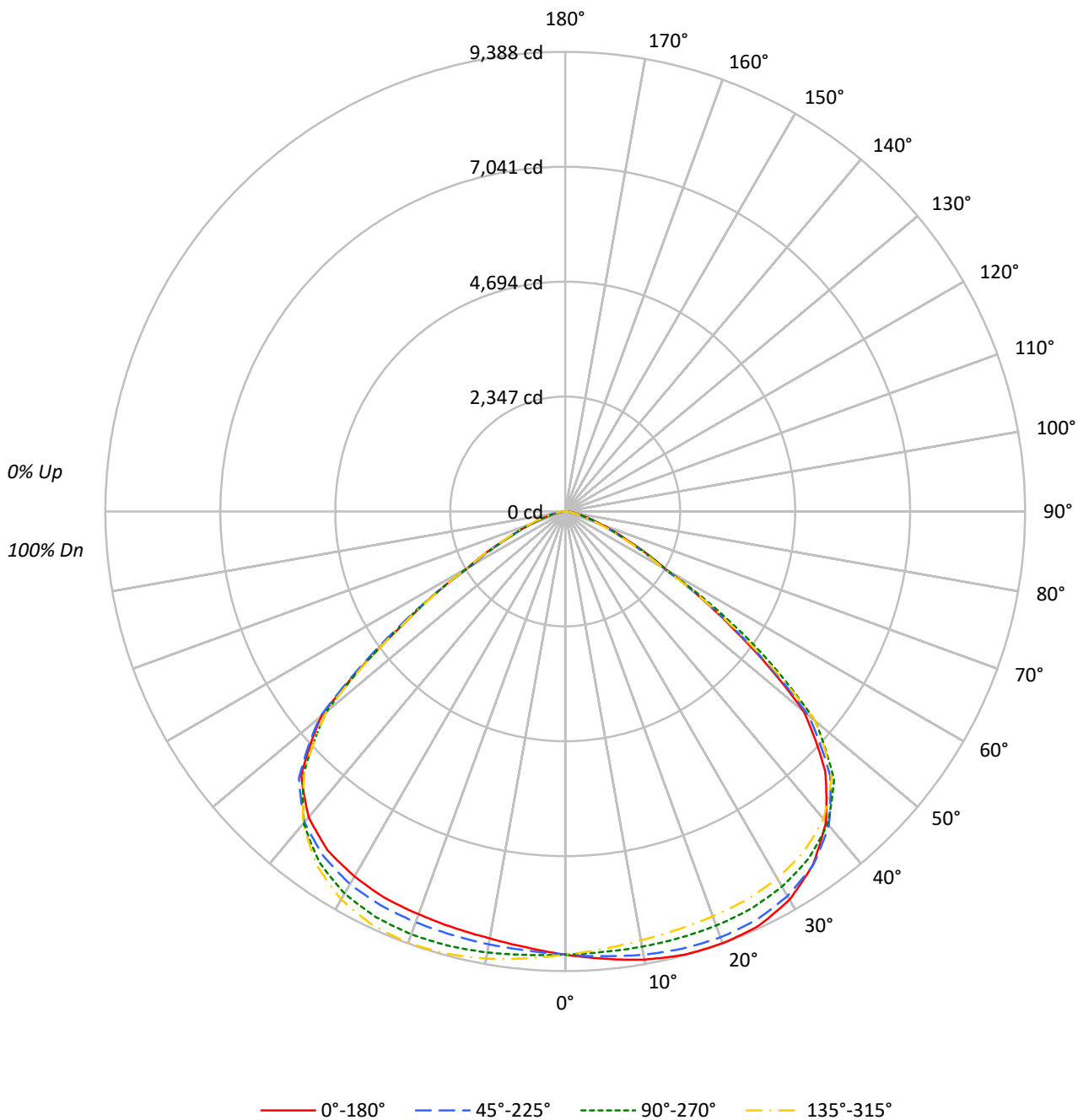
Lumens per Lamp: 24617 (1 lamp)
Luminaire Lumens: 24617.0 lumens
Efficiency: 100.0%
Efficacy: 164.8 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 1.46 / 1.52
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

Input Watts (W): 149.4
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	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	47	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°	70142	70142	70142	70142
5°	71318	70227	69537	70706
10°	73130	71023	69657	71971
15°	75199	72349	70603	73675
20°	77401	74222	72172	75779
25°	79856	76576	74477	78139
30°	81918	79169	76993	80612
35°	83373	81901	79943	82749
40°	83737	84287	82412	84029
45°	82249	85031	83507	82640
50°	76681	80409	78281	76692
55°	56829	62073	55209	55967
60°	36944	37147	35534	35063
65°	25895	24922	24038	23433
70°	18118	16867	15880	15816
75°	12701	11609	10453	11073
80°	9156	7728	6577	7955
85°	6578	4080	3814	6303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 85031 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	865.7	3.5	3.5
10°-20°	2577.2	10.5	10.5
20°-30°	4173.5	17.0	17.0
30°-40°	5421.1	22.0	22.0
40°-50°	5801.6	23.6	23.6
50°-60°	3849.4	15.6	15.6
60°-70°	1395.1	5.7	5.7
70°-80°	439.4	1.8	1.8
80°-90°	93.9	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°	7616.4	30.9	30.9
0°-40°	13037.6	53.0	53.0
0°-60°	22688.6	92.2	92.2
0°-90°	24617.0	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°	24617.0	100.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	9053	9053	9053	9053	9053	
5°	9170	9030	8941	9091	9170	878
15°	9375	9020	8802	9185	9375	2654
25°	9341	8958	8712	9140	9341	4305
35°	8815	8659	8452	8749	8815	5498
45°	7506	7760	7621	7542	7506	5725
55°	4207	4595	4087	4143	4207	3822
65°	1412	1359	1311	1278	1412	1483
75°	424	388	349	370	424	488
85°	74	46	43	71	74	114
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°	9053.2	9053.2	9053.2	9053.2	9053.2	9053.2	9053.2	9053.2	9053.2	9053.2	9053.2
5°	9169.9	9146.3	9093.0	9029.6	8980.9	8951.6	8941.0	8966.3	9037.2	9091.2	9151.7
10°	9295.4	9248.2	9139.1	9027.6	8918.0	8872.5	8854.0	8921.1	9032.2	9148.1	9245.9
15°	9375.2	9311.9	9178.2	9019.9	8880.1	8804.9	8802.2	8878.8	9026.7	9185.2	9315.5
20°	9387.6	9333.3	9183.4	9002.0	8845.9	8759.6	8753.4	8843.1	9013.0	9190.9	9337.7
25°	9341.3	9277.7	9148.3	8957.6	8796.7	8710.4	8712.1	8803.8	8961.4	9140.4	9283.9
30°	9156.6	9119.9	9023.6	8849.3	8688.5	8622.7	8606.1	8719.6	8860.3	9010.6	9129.9
35°	8814.8	8847.3	8793.6	8659.2	8516.1	8457.8	8452.2	8539.2	8659.2	8748.8	8832.1
40°	8279.3	8349.5	8399.8	8333.7	8226.8	8178.5	8148.3	8242.1	8319.8	8308.2	8325.9
45°	7506.5	7597.3	7705.1	7760.4	7702.0	7684.1	7621.3	7693.3	7680.0	7542.2	7527.8
50°	6361.8	6460.7	6505.8	6671.1	6671.9	6671.7	6494.5	6561.5	6516.5	6362.7	6369.5
55°	4207.1	4282.7	4291.4	4595.3	4400.0	4336.2	4087.2	4205.2	4283.7	4143.3	4108.8
60°	2384.2	2333.1	2278.7	2397.3	2328.0	2235.0	2293.2	2202.9	2174.7	2262.8	2270.0
65°	1412.5	1349.3	1329.7	1359.4	1323.7	1262.8	1311.2	1261.5	1254.0	1278.2	1330.0
70°	799.8	760.0	745.8	744.6	718.9	687.4	701.0	690.8	694.1	698.2	753.4
75°	424.3	407.8	400.8	387.8	362.0	345.0	349.2	351.5	355.5	369.9	401.6
80°	205.2	204.6	195.7	173.2	156.3	147.5	147.4	156.9	159.5	178.3	192.9
85°	74.0	72.8	71.5	45.9	44.3	43.6	42.9	43.2	44.0	70.9	73.0
90°	65.0	65.0	64.7	38.1	37.7	37.6	37.5	37.6	37.6	64.9	65.0



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	9053.2	9053.2
5°	9180.5	9169.9
10°	9304.5	9295.4
15°	9385.9	9375.2
20°	9414.8	9387.6
25°	9353.5	9341.3
30°	9173.5	9156.6
35°	8834.9	8814.8
40°	8308.9	8279.3
45°	7519.7	7506.5
50°	6369.4	6361.8
55°	4079.2	4207.1
60°	2281.0	2384.2
65°	1349.8	1412.5
70°	763.8	799.8
75°	413.2	424.3
80°	203.4	205.2
85°	73.8	74.0
90°	65.1	65.0

(END OF REPORT)