

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P364430

Luminaire Tested: **VHB-18-N-UNV-L835-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364430
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-18-N-UNV-L835-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 3500K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17931.0 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

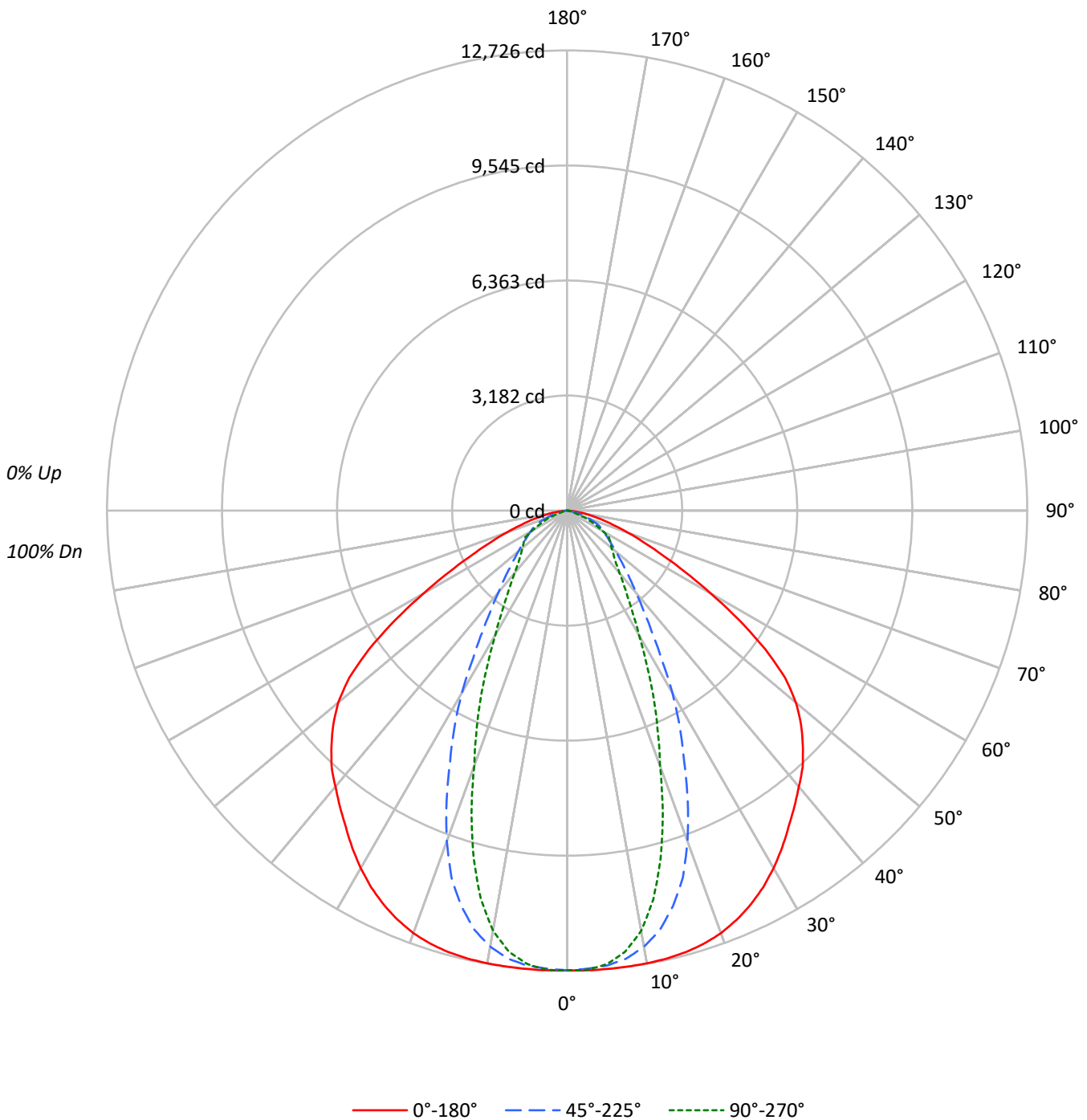
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P364430

CATALOG NUMBER: VHB-18-N-UNV-L835-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P364430

CATALOG NUMBER: VHB-18-N-UNV-L835-CD-U

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	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			
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42					42			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	78204	78204	78204
5°	78571	77974	77749
10°	79396	76480	73686
15°	80529	72058	63536
20°	81396	63659	49191
25°	81559	51982	38117
30°	81101	41286	28210
35°	80177	30593	21938
40°	80050	23757	18104
45°	80219	19552	16083
50°	79081	16910	15340
55°	71790	15074	15499
60°	56441	14405	14122
65°	41920	13962	10627
70°	32151	11179	6487
75°	24475	7971	3579
80°	17973	3709	2894
85°	11249	3190	2576



TEST NUMBER: P364430

CATALOG NUMBER: VHB-18-N-UNV-L835-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1194.6	6.7
10°-20°	3144.6	17.5
20°-30°	3797.4	21.2
30°-40°	3395.4	18.9
40°-50°	2658.8	14.8
50°-60°	2008.9	11.2
60°-70°	1193.2	6.7
70°-80°	458.5	2.6
80°-90°	79.7	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	8136.6	45.4
0°-40°	11531.9	64.3
0°-60°	16199.6	90.3
0°-90°	17931.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17931.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12714	12714	12714	12714	12714	
5°	12726	12670	12629	12612	12592	###
15°	12646	12229	11316	10370	9978	3573
25°	12018	10604	7660	6039	5616	5533
35°	10678	7598	4074	3177	2922	6696
45°	9222	3929	2248	1899	1849	7099
55°	6695	2132	1406	1400	1445	5879
65°	2880	1197	959	800	730	2968
75°	1030	576	335	166	151	1127
85°	159	56	45	40	36	212
90°	0	0	0	0	0	



TEST NUMBER: P364430

CATALOG NUMBER: VHB-18-N-UNV-L835-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12714.5	12714.5	12714.5	12714.5	12714.5
2.5°	12726.4	12684.4	12681.2	12708.2	12712.1
5°	12725.6	12670.1	12628.9	12612.2	12592.4
7.5°	12721.7	12637.6	12498.9	12365.7	12303.8
10°	12712.1	12563.1	12245.2	11942.3	11798.0
12.5°	12691.5	12429.9	11868.6	11312.0	11009.2
15°	12646.3	12229.3	11316.0	10370.1	9977.7
17.5°	12564.7	11952.6	10638.9	9303.8	8798.8
20°	12435.4	11600.6	9725.6	8087.6	7515.2
22.5°	12249.9	11140.8	8719.5	6992.7	6535.2
25°	12017.6	10604.0	7659.5	6038.9	5616.4
27.5°	11741.7	9977.7	6746.1	5151.0	4734.7
30°	11419.0	9245.9	5813.0	4312.2	3972.0
32.5°	11058.3	8475.3	4838.6	3672.4	3392.5
35°	10677.8	7598.4	4074.3	3176.8	2921.6
37.5°	10319.4	6659.7	3450.4	2738.4	2559.2
40°	9969.8	5673.4	2958.8	2391.9	2254.8
42.5°	9639.9	4730.0	2583.0	2101.8	2012.2
45°	9222.1	3929.2	2247.7	1898.8	1848.9
47.5°	8778.9	3316.4	1981.3	1733.9	1716.5
50°	8264.4	2824.8	1767.2	1590.4	1603.1
52.5°	7596.8	2436.3	1564.2	1488.9	1526.2
55°	6694.6	2131.9	1405.7	1400.1	1445.3
57.5°	5637.8	1840.9	1280.4	1315.3	1366.0
60°	4588.1	1607.1	1171.0	1221.7	1148.0
62.5°	3665.2	1392.2	1067.1	974.4	911.0
65°	2880.3	1197.2	959.3	800.0	730.2
67.5°	2296.8	1015.6	807.1	636.6	578.8
70°	1787.8	853.9	621.6	478.1	360.7
72.5°	1370.0	713.5	485.2	271.9	205.3
75°	1029.9	575.6	335.4	165.7	150.6
77.5°	734.2	427.3	179.2	119.7	111.0
80°	507.4	274.3	104.7	86.4	81.7
82.5°	314.8	132.4	71.4	61.8	57.9
85°	159.4	55.5	45.2	39.6	36.5
87.5°	53.1	27.0	20.6	19.0	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)