

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: P364421

Luminaire Tested: **VHB-9-W-UNV-L835-CD-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P364421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-3)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-9-W-UNV-L835-CD-U  
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 3500K, 80CRI LEDS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9018.0 lumens  
Efficiency: N/A  
Efficacy: 139.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

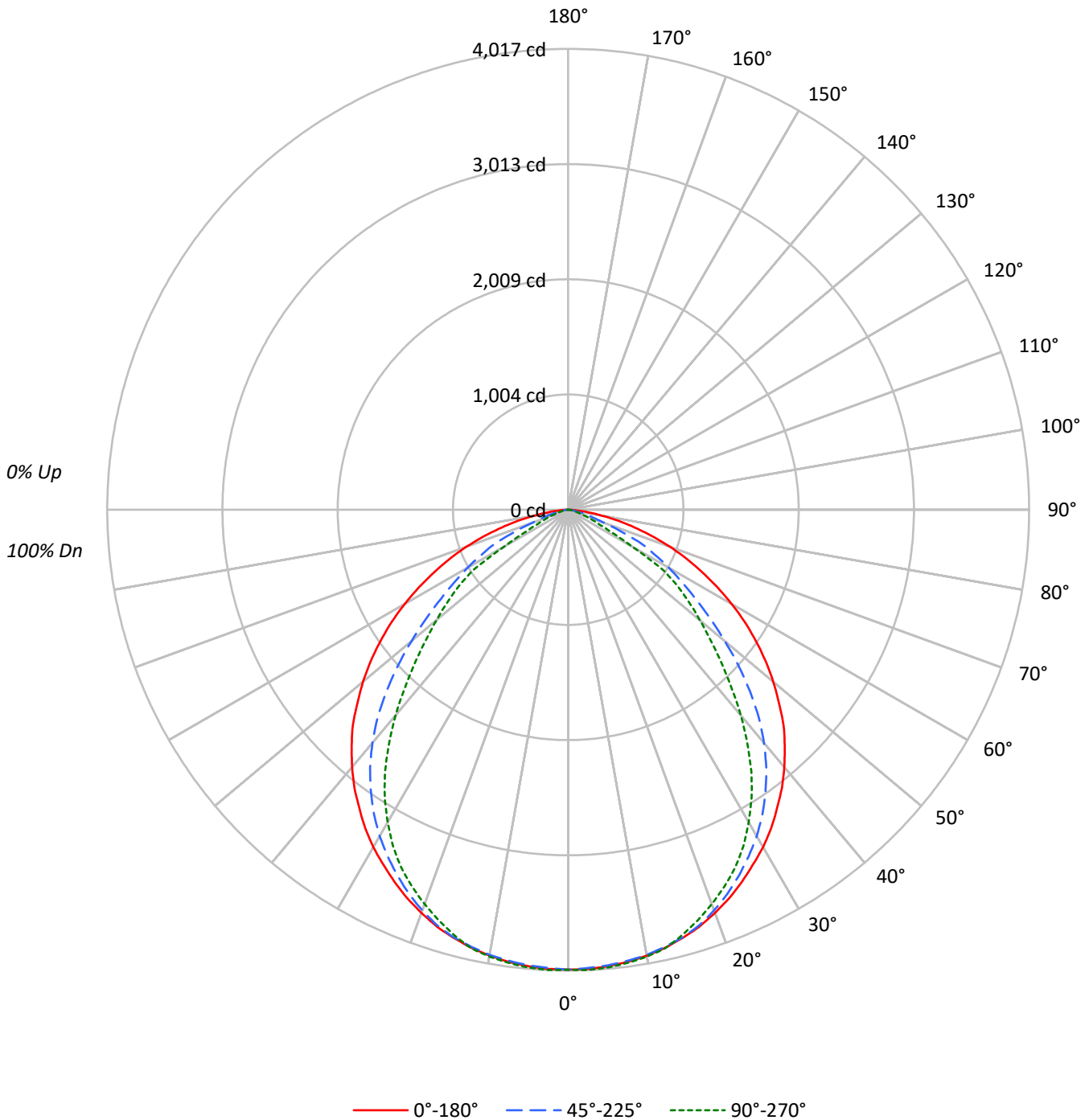
Input Watts (W): 64.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P364421

CATALOG NUMBER: VHB-9-W-UNV-L835-CD-U

### Luminous Intensity Polar Plot





TEST NUMBER: P364421

CATALOG NUMBER: VHB-9-W-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	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89					87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	70	77	72	68	75	71	67					65				
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59					57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52					50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46					44				
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41					39				
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37					36				
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34					32				
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31					29				

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

	0°	45°	90°
0°	24661	24661	24661
5°	24664	24614	24727
10°	24655	24602	24704
15°	24597	24571	24445
20°	24478	24327	23947
25°	24297	23884	23360
30°	24121	23333	22335
35°	23833	22516	20884
40°	23519	21305	18791
45°	23091	19485	16418
50°	22328	17059	14343
55°	21417	14532	12520
60°	20232	12464	7994
65°	18747	10396	4238
70°	16921	5908	2746
75°	14216	3619	1709
80°	10803	1828	1495
85°	6563	1666	1348



TEST NUMBER: P364421

CATALOG NUMBER: VHB-9-W-UNV-L835-CD-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	379.6	4.2
10°-20°	1086.0	12.0
20°-30°	1618.9	18.0
30°-40°	1864.4	20.7
40°-50°	1735.1	19.2
50°-60°	1320.3	14.6
60°-70°	708.7	7.9
70°-80°	260.8	2.9
80°-90°	44.3	0.5
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°	3084.5	34.2
0°-40°	4948.8	54.9
0°-60°	8004.2	88.8
0°-90°	9018.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9018.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4009	4009	4009	4009	4009	
5°	3995	3983	3987	4000	4005	380
15°	3863	3857	3859	3851	3839	1090
25°	3580	3577	3519	3469	3442	1650
35°	3174	3136	2999	2848	2781	1987
45°	2655	2527	2240	1974	1888	2040
55°	1997	1771	1355	1206	1168	1784
65°	1288	946	714	354	291	1277
75°	598	392	152	79	72	641
85°	93	30	24	20	19	124
90°	0	0	0	0	0	



TEST NUMBER: P364421

CATALOG NUMBER: VHB-9-W-UNV-L835-CD-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4009.4	4009.4	4009.4	4009.4	4009.4
2.5°	4006.5	3994.3	3998.4	4011.4	4016.7
5°	3994.7	3983.4	3986.6	4000.4	4004.9
7.5°	3975.3	3964.3	3966.7	3979.7	3984.2
10°	3947.6	3936.3	3939.1	3951.7	3955.4
12.5°	3910.3	3899.7	3902.2	3911.1	3915.2
15°	3862.8	3856.7	3858.7	3851.4	3838.8
17.5°	3809.6	3800.6	3798.2	3765.7	3752.3
20°	3739.7	3736.5	3716.6	3676.4	3658.5
22.5°	3666.2	3660.1	3625.6	3577.3	3555.8
25°	3580.1	3577.3	3519.2	3469.3	3442.1
27.5°	3487.5	3480.6	3405.9	3343.4	3306.4
30°	3396.2	3379.1	3285.3	3197.6	3144.8
32.5°	3292.6	3260.5	3148.4	3036.4	2975.5
35°	3174.0	3135.5	2998.6	2847.9	2781.3
37.5°	3059.1	3001.0	2836.2	2647.7	2562.5
40°	2929.2	2845.9	2653.4	2434.5	2340.3
42.5°	2792.3	2690.8	2458.9	2204.3	2107.6
45°	2654.6	2526.7	2240.0	1974.0	1887.5
47.5°	2491.0	2355.3	2012.6	1754.3	1680.0
50°	2333.4	2175.0	1782.8	1549.7	1498.9
52.5°	2168.5	1976.5	1559.4	1376.7	1327.5
55°	1997.2	1771.4	1355.1	1206.5	1167.5
57.5°	1825.0	1560.6	1174.0	1051.8	981.9
60°	1644.7	1351.5	1013.2	854.8	649.8
62.5°	1467.2	1133.8	852.8	536.0	413.4
65°	1288.1	946.2	714.3	353.7	291.2
67.5°	1117.2	764.7	509.6	256.2	218.1
70°	940.9	625.4	328.5	183.6	152.7
72.5°	764.3	503.2	225.4	120.6	97.9
75°	598.2	391.9	152.3	78.8	71.9
77.5°	448.3	270.5	84.9	58.5	54.8
80°	305.0	162.0	51.6	44.7	42.2
82.5°	182.7	77.6	37.4	32.9	31.7
85°	93.0	30.1	23.6	20.3	19.1
87.5°	27.6	15.0	10.6	8.1	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)