

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: P364417

Luminaire Tested: **VHB-18-W-UNV-L850-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364417
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-18-W-UNV-L850-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 5000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19160.0 lumens
Efficiency: N/A
Efficacy: 143.2 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

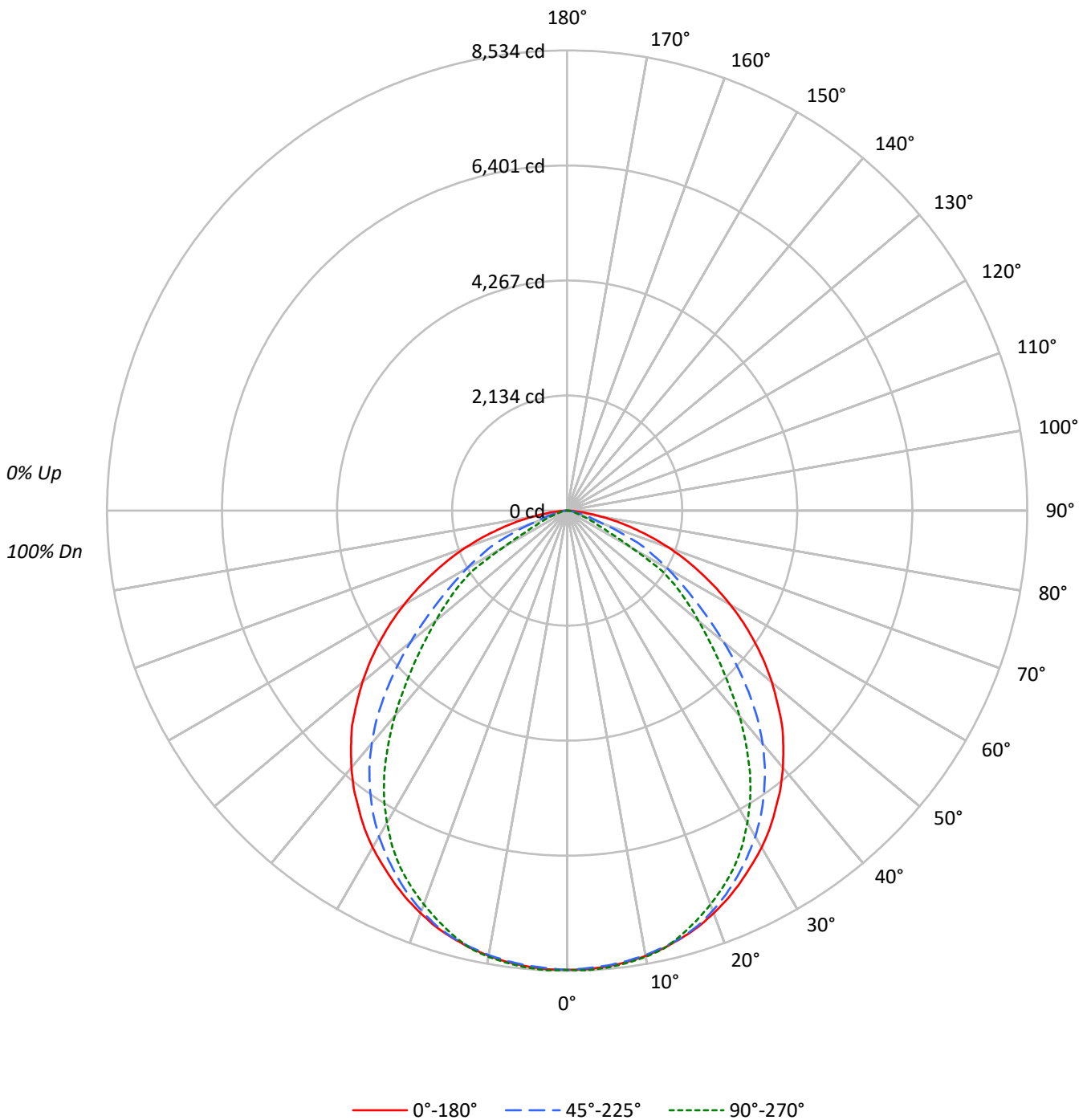
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P364417

CATALOG NUMBER: VHB-18-W-UNV-L850-CD-U

Luminous Intensity Polar Plot





TEST NUMBER: P364417

CATALOG NUMBER: VHB-18-W-UNV-L850-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°	52396	52396	52396
5°	52404	52297	52537
10°	52384	52271	52487
15°	52260	52206	51936
20°	52008	51686	50878
25°	51623	50744	49631
30°	51248	49575	47455
35°	50637	47837	44371
40°	49969	45266	39924
45°	49061	41398	34884
50°	47440	36244	30473
55°	45503	30875	26601
60°	42987	26482	16982
65°	39831	22089	9003
70°	35951	12553	5834
75°	30203	7690	3629
80°	22953	3882	3177
85°	13945	3529	2865



TEST NUMBER: P364417

CATALOG NUMBER: VHB-18-W-UNV-L850-CD-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	806.5	4.2
10°-20°	2307.4	12.0
20°-30°	3439.5	18.0
30°-40°	3961.2	20.7
40°-50°	3686.5	19.2
50°-60°	2805.1	14.6
60°-70°	1505.7	7.9
70°-80°	554.0	2.9
80°-90°	94.2	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°	6553.4	34.2
0°-40°	10514.5	54.9
0°-60°	17006.1	88.8
0°-90°	19160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8518	8518	8518	8518	8518	
5°	8487	8463	8470	8500	8509	807
15°	8207	8194	8198	8183	8156	2316
25°	7606	7600	7477	7371	7313	3506
35°	6744	6662	6371	6051	5909	4222
45°	5640	5368	4759	4194	4010	4334
55°	4243	3764	2879	2563	2481	3790
65°	2737	2010	1518	752	619	2714
75°	1271	833	324	167	153	1362
85°	198	64	50	43	41	263
90°	0	0	0	0	0	



TEST NUMBER: P364417

CATALOG NUMBER: VHB-18-W-UNV-L850-CD-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8518.5	8518.5	8518.5	8518.5	8518.5
2.5°	8512.4	8486.5	8495.2	8522.8	8534.0
5°	8487.4	8463.2	8470.1	8499.5	8509.0
7.5°	8446.0	8422.7	8427.9	8455.5	8465.0
10°	8387.3	8363.2	8369.2	8395.9	8403.7
12.5°	8307.9	8285.5	8290.7	8309.7	8318.3
15°	8207.0	8194.0	8198.4	8182.8	8156.1
17.5°	8094.0	8075.0	8069.8	8000.8	7972.3
20°	7945.6	7938.7	7896.4	7811.0	7773.0
22.5°	7789.4	7776.4	7703.1	7600.4	7554.7
25°	7606.5	7600.4	7477.1	7370.9	7313.1
27.5°	7409.8	7395.1	7236.3	7103.5	7024.9
30°	7215.6	7179.4	6980.1	6793.7	6681.6
32.5°	6995.6	6927.4	6689.3	6451.2	6321.8
35°	6743.7	6661.7	6370.9	6050.8	5909.3
37.5°	6499.5	6376.1	6025.8	5625.5	5444.3
40°	6223.4	6046.5	5637.6	5172.5	4972.3
42.5°	5932.6	5716.9	5224.3	4683.3	4477.9
45°	5640.1	5368.4	4759.2	4194.1	4010.3
47.5°	5292.4	5004.3	4276.1	3727.3	3569.4
50°	4957.7	4621.2	3787.7	3292.5	3184.6
52.5°	4607.4	4199.3	3313.2	2924.9	2820.5
55°	4243.3	3763.5	2879.2	2563.4	2480.6
57.5°	3877.4	3315.8	2494.4	2234.7	2086.3
60°	3494.4	2871.4	2152.7	1816.2	1380.5
62.5°	3117.3	2408.9	1811.9	1138.9	878.3
65°	2736.8	2010.3	1517.7	751.5	618.6
67.5°	2373.6	1624.7	1082.8	544.4	463.3
70°	1999.1	1328.7	698.0	390.0	324.4
72.5°	1623.8	1069.0	478.9	256.3	207.9
75°	1270.9	832.6	323.6	167.4	152.7
77.5°	952.5	574.6	180.3	124.2	116.5
80°	648.0	344.3	109.6	94.9	89.7
82.5°	388.3	164.8	79.4	69.9	67.3
85°	197.6	63.8	50.0	43.1	40.6
87.5°	58.7	31.9	22.4	17.3	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)