

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: CORELITE

Report Number: P183478

Luminaire Tested: **VB-WS-3L40-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183478  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26969)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: VB-WS-3L40-1D-UNV-4-STD-DM8  
Description: CORELITE VERTECHS SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.  
WaveStream WITH FROSTED LENS. 80% UP / 20% DOWN.  
Light Source: (336)4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4974.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')  
CIE Type: Semi-Indirect

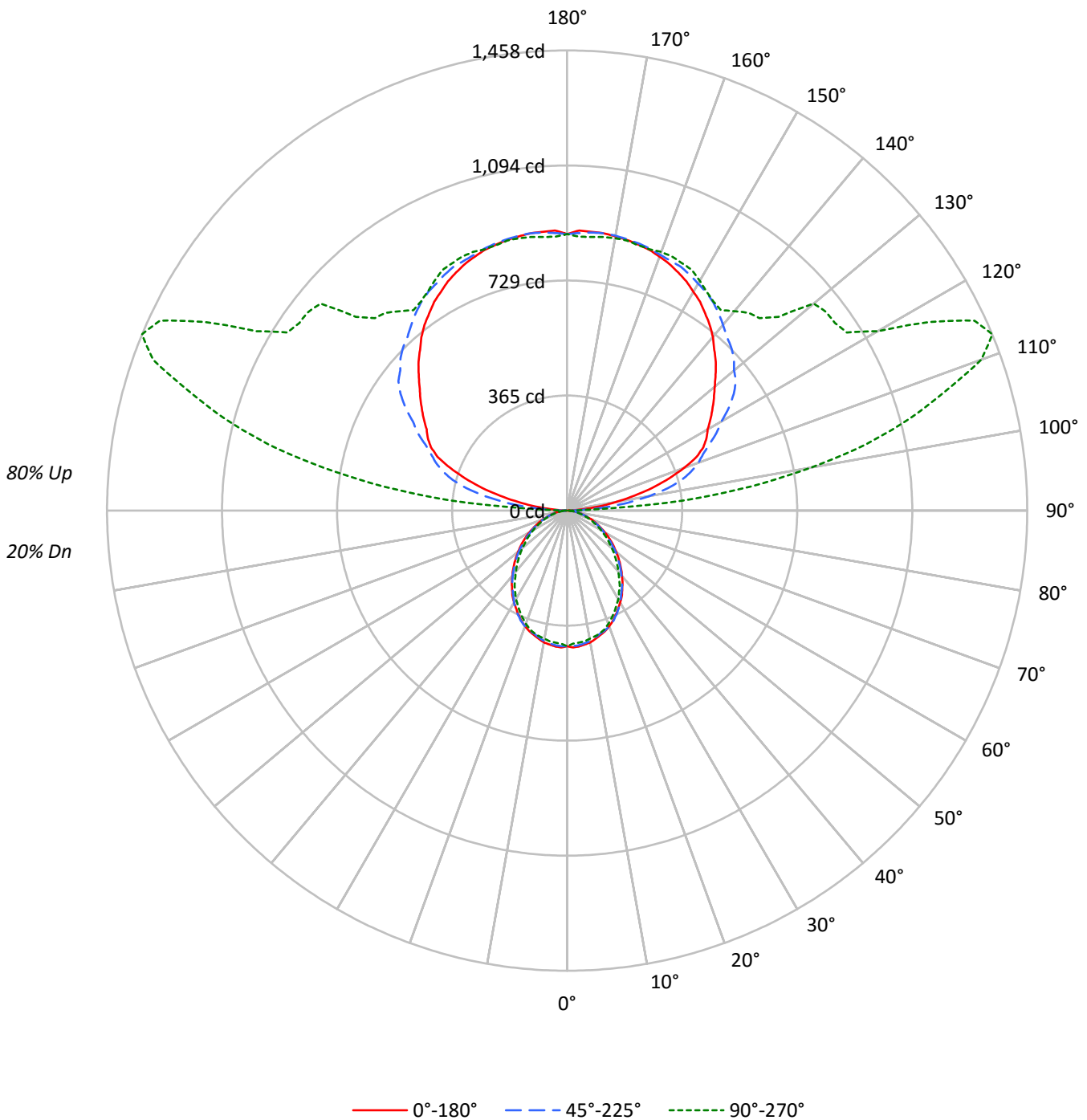
Input Watts (W): 46.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	87	83	80	81	77	74	71	58	57	55	41	40	39	26	25	24	17
2	83	76	70	65	73	67	63	59	51	48	45	36	34	33	23	22	21	15
3	76	67	60	55	67	59	54	49	45	41	38	32	30	28	20	19	18	12
4	69	59	52	46	61	53	46	41	40	36	32	29	26	24	18	17	15	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13	9
6	58	47	39	34	51	42	35	31	32	28	24	23	20	18	15	13	12	8
7	54	42	35	29	47	38	31	27	29	24	21	21	18	16	13	12	10	7
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	12	11	9	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	12	11	10	8	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	10	9	8	5

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

	0°	45°	90°
0°	3445	3445	3445
5°	3457	3316	3221
10°	3415	3174	3053
15°	3332	3002	2903
20°	3257	2872	2709
25°	3133	2691	2486
30°	3008	2486	2270
35°	2857	2266	2042
40°	2693	2055	1798
45°	2528	1834	1588
50°	2354	1626	1380
55°	2192	1414	1199
60°	2009	1207	1012
65°	1820	1021	830
70°	1656	833	668
75°	1424	638	504
80°	1249	453	333
85°	994	278	175



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.4	0.8
10°-20°	114.0	2.3
20°-30°	166.0	3.3
30°-40°	187.2	3.8
40°-50°	177.8	3.6
50°-60°	146.3	2.9
60°-70°	102.9	2.1
70°-80°	58.0	1.2
80°-90°	19.2	0.4
90°-100°	195.1	3.9
100°-110°	595.2	12.0
110°-120°	713.7	14.3
120°-130°	659.7	13.3
130°-140°	580.5	11.7
140°-150°	496.7	10.0
150°-160°	390.6	7.9
160°-170°	246.7	5.0
170°-180°	84.0	1.7
0°-30°	320.4	6.4
0°-40°	507.6	10.2
0°-60°	831.7	16.7
0°-90°	1011.9	20.3
90°-120°	1503.9	30.2
90°-150°	3240.8	65.2
90°-180°	3962.0	79.7
0°-180°	4974.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	432	426	428	426	420	41
15°	408	404	404	404	402	115
25°	364	360	366	356	354	168
35°	304	306	302	294	290	190
45°	236	238	232	222	218	182
55°	170	172	164	156	154	152
65°	108	110	104	98	96	107
75°	56	58	54	52	50	60
85°	18	20	18	16	14	18
90°	2	6	4	2	0	4
95°	54	70	128	318	374	66
105°	280	286	376	934	1122	293
115°	476	476	496	974	1424	464
125°	562	598	644	904	1036	503
135°	666	684	734	806	862	514
145°	762	768	806	804	808	478
155°	832	826	852	858	864	384
165°	872	868	876	870	870	247
175°	886	882	884	878	870	85
180°	876	876	876	876	876	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	430.1	430.1	430.1	430.1	430.1
2.5°	434.1	428.1	430.1	428.1	422.1
5°	432.1	426.1	428.1	426.1	420.1
7.5°	428.1	422.1	424.1	422.1	418.1
10°	424.1	418.1	420.1	416.1	412.1
12.5°	416.1	412.1	412.1	408.1	408.1
15°	408.1	404.1	404.1	404.1	402.1
17.5°	400.1	394.1	398.1	398.1	394.1
20°	390.1	384.1	390.1	386.1	382.1
22.5°	378.1	374.1	380.1	372.1	368.1
25°	364.1	360.1	366.1	356.1	354.1
27.5°	350.1	348.1	352.1	342.1	338.1
30°	336.1	334.1	336.1	328.1	324.1
32.5°	322.1	320.1	318.1	310.1	306.1
35°	304.1	306.1	302.1	294.1	290.1
37.5°	288.1	290.1	286.1	276.1	270.1
40°	270.1	274.1	268.1	258.1	252.1
42.5°	254.1	256.1	250.1	240.1	236.1
45°	236.1	238.1	232.1	222.0	218.0
47.5°	220.0	222.0	216.0	206.0	202.0
50°	202.0	204.0	198.0	188.0	184.0
52.5°	186.0	188.0	180.0	172.0	168.0
55°	170.0	172.0	164.0	156.0	154.0
57.5°	154.0	156.0	148.0	142.0	138.0
60°	138.0	140.0	132.0	126.0	124.0
62.5°	122.0	124.0	118.0	112.0	110.0
65°	108.0	110.0	104.0	98.0	96.0
67.5°	94.0	96.0	90.0	86.0	84.0
70°	82.0	82.0	78.0	74.0	72.0
72.5°	68.0	70.0	66.0	62.0	60.0
75°	56.0	58.0	54.0	52.0	50.0
77.5°	46.0	48.0	44.0	42.0	40.0
80°	36.0	38.0	34.0	32.0	30.0
82.5°	26.0	28.0	26.0	24.0	22.0
85°	18.0	20.0	18.0	16.0	14.0
87.5°	8.0	12.0	8.0	8.0	6.0
90°	2.0	6.0	4.0	2.0	0.0
92.5°	20.0	28.0	42.0	72.0	78.0
95°	54.0	70.0	128.0	318.1	374.1
97.5°	102.0	120.0	196.0	498.1	588.1
100°	156.0	174.0	264.1	656.1	784.2
102.5°	218.0	232.1	326.1	802.2	970.2
105°	280.1	286.1	376.1	934.2	1122.2
107.5°	338.1	342.1	412.1	1034.2	1256.3
110°	394.1	388.1	442.1	1074.2	1396.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	444.1	434.1	466.1	1044.2	1458.3
115°	476.1	476.1	496.1	974.2	1424.3
117.5°	498.1	512.1	534.1	938.2	1294.3
120°	514.1	550.1	564.1	924.2	1136.2
122.5°	538.1	582.1	608.1	912.2	1050.2
125°	562.1	598.1	644.1	904.2	1036.2
127.5°	586.1	610.1	674.1	902.2	1034.2
130°	610.1	630.1	690.1	866.2	1020.2
132.5°	638.1	658.1	716.2	804.2	908.2
135°	666.1	684.1	734.2	806.2	862.2
137.5°	690.1	704.2	748.2	806.2	850.2
140°	718.2	728.2	768.2	790.2	824.2
142.5°	742.2	750.2	788.2	790.2	800.2
145°	762.2	768.2	806.2	804.2	808.2
147.5°	784.2	786.2	820.2	822.2	822.2
150°	800.2	800.2	830.2	840.2	840.2
152.5°	818.2	814.2	842.2	852.2	858.2
155°	832.2	826.2	852.2	858.2	864.2
157.5°	846.2	840.2	856.2	866.2	870.2
160°	856.2	850.2	862.2	868.2	872.2
162.5°	866.2	858.2	870.2	866.2	868.2
165°	872.2	868.2	876.2	870.2	870.2
167.5°	878.2	876.2	880.2	876.2	876.2
170°	882.2	880.2	884.2	878.2	876.2
172.5°	886.2	882.2	886.2	878.2	874.2
175°	886.2	882.2	884.2	878.2	870.2
177.5°	888.2	880.2	880.2	872.2	868.2
180°	876.2	876.2	876.2	876.2	876.2

(END OF REPORT)