

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: CORELITE

Report Number: P621782

Luminaire Tested: VLT-FB-050U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621782
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-19)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FB-050U-100D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

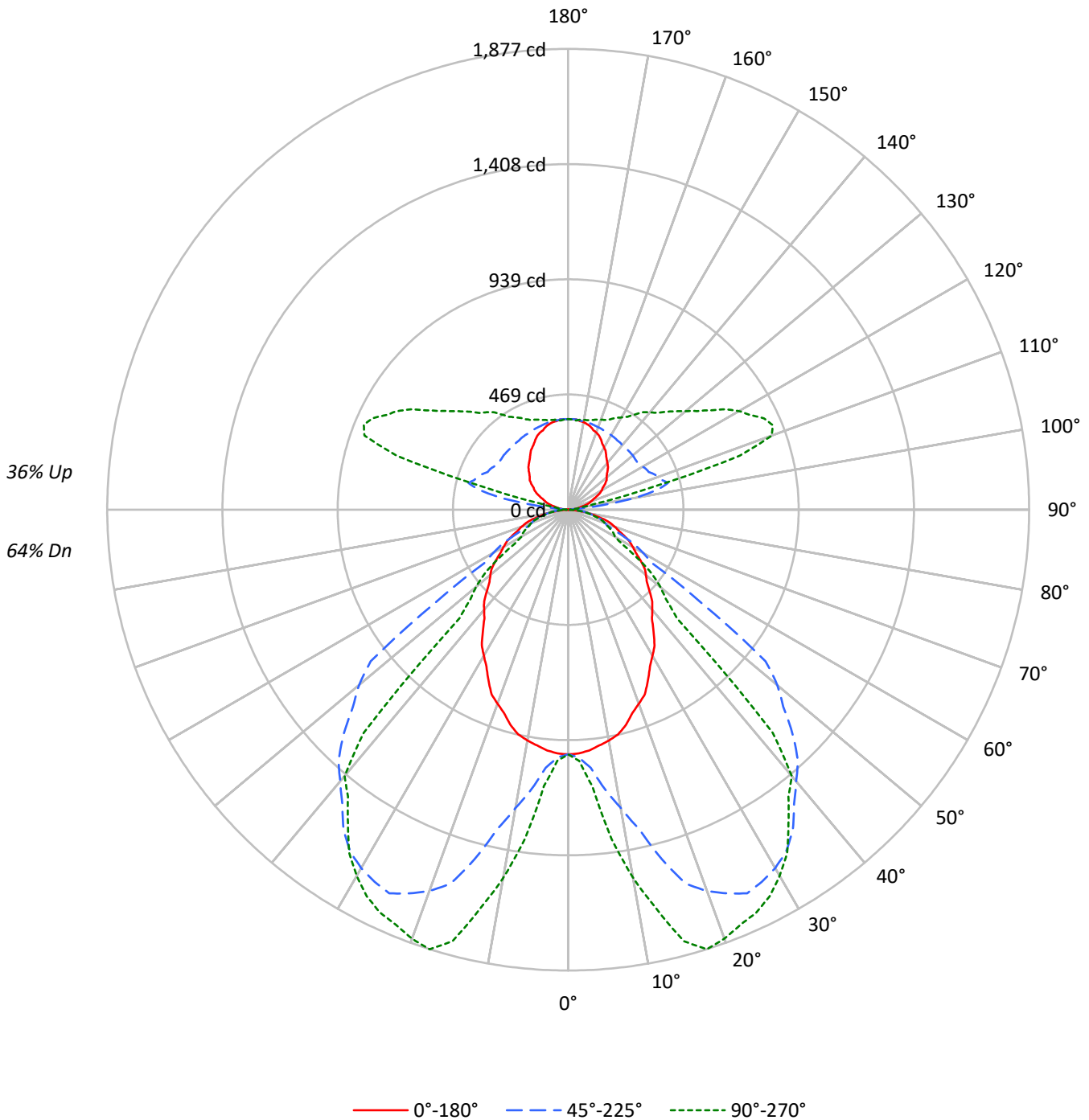
Lumens per Lamp: N/A
Luminaire Lumens: 5555.6 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.8
Input Voltage (V): 120
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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64				
1	102	98	94	91	96	92	89	86	81	79	77	71	70	68	62	61	60	56				
2	93	86	80	75	88	81	76	72	72	68	65	64	61	58	56	54	52	48				
3	86	76	69	64	80	72	66	61	64	59	55	57	53	50	50	47	45	41				
4	79	68	60	55	74	65	58	52	58	52	48	51	47	44	45	42	39	36				
5	73	61	53	47	68	58	51	45	52	46	42	46	42	38	41	37	35	32				
6	67	55	47	41	63	52	45	40	47	41	37	42	37	34	37	34	31	28				
7	62	50	42	36	58	47	40	35	43	37	32	38	34	30	34	30	27	25				
8	58	45	38	32	54	43	36	31	39	33	29	35	30	27	31	28	25	22				
9	54	42	34	29	51	40	33	28	36	30	26	32	28	24	29	25	22	20				
10	50	38	31	26	47	36	30	25	33	27	24	30	25	22	27	23	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7152	7152	7152
5°	7092	7602	8142
10°	6952	8989	11100
15°	6742	10956	13514
20°	6420	12623	14201
25°	6078	13649	14339
30°	5690	13965	14267
35°	5306	13966	13699
40°	4991	13530	13264
45°	4748	13116	6352
50°	4613	12415	5472
55°	4485	8312	4334
60°	4362	5059	3140
65°	4265	3853	3267
70°	4207	3357	3357
75°	4101	3482	3369
80°	3599	3517	3347
85°	2668	3672	3170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 13116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.5	1.9
10°-20°	396.3	7.1
20°-30°	671.2	12.1
30°-40°	814.2	14.7
40°-50°	716.7	12.9
50°-60°	443.5	8.0
60°-70°	240.4	4.3
70°-80°	137.0	2.5
80°-90°	45.6	0.8
90°-100°	45.4	0.8
100°-110°	323.5	5.8
110°-120°	439.1	7.9
120°-130°	357.4	6.4
130°-140°	287.5	5.2
140°-150°	226.6	4.1
150°-160°	165.7	3.0
160°-170°	102.9	1.9
170°-180°	35.1	0.6
0°-30°	1175.0	21.1
0°-40°	1989.2	35.8
0°-60°	3149.3	56.7
0°-90°	3572.4	64.3
90°-120°	808.0	14.5
90°-150°	1679.5	30.2
90°-180°	1983.0	35.7
0°-180°	5555.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	984	1016	1055	1101	1130	93
15°	908	1046	1475	1744	1819	254
25°	768	1051	1724	1775	1811	353
35°	606	974	1594	1572	1564	380
45°	468	801	1292	1095	626	363
55°	358	559	664	384	346	321
65°	251	315	227	194	192	249
75°	148	130	126	124	122	154
85°	32	44	45	40	38	39
90°	0	2	5	7	7	2
95°	19	34	19	21	26	21
105°	72	111	420	537	355	76
115°	128	155	362	753	880	127
125°	183	208	341	597	706	163
135°	228	252	344	492	564	175
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.6	996.6	996.6	996.6	996.6
2.5°	993.4	1004.5	1009.6	1019.4	1024.2
5°	984.5	1016.2	1055.4	1100.6	1130.3
7.5°	968.7	1025.3	1149.4	1292.2	1353.2
10°	954.1	1031.3	1233.6	1440.1	1523.3
12.5°	937.9	1037.3	1332.5	1582.8	1667.5
15°	907.5	1046.2	1474.7	1743.8	1819.1
17.5°	868.2	1051.6	1597.9	1829.1	1877.4
20°	840.7	1052.6	1653.0	1839.8	1859.6
22.5°	814.7	1053.6	1691.8	1813.8	1830.4
25°	767.7	1051.0	1723.9	1775.3	1811.0
27.5°	720.7	1039.2	1708.1	1749.6	1775.3
30°	686.7	1027.4	1685.4	1719.8	1721.8
32.5°	654.3	1007.6	1651.3	1661.4	1658.6
35°	605.7	974.1	1594.2	1571.7	1563.8
37.5°	560.3	929.5	1510.8	1474.7	1472.7
40°	532.8	897.2	1444.3	1410.0	1416.0
42.5°	506.8	860.2	1384.4	1344.1	1232.8
45°	467.9	800.7	1292.4	1095.4	625.9
47.5°	434.3	733.0	1188.3	586.8	538.8
50°	413.2	686.6	1112.1	516.0	490.2
52.5°	392.2	643.3	1013.2	463.9	430.3
55°	358.5	558.6	664.4	384.0	346.4
57.5°	326.5	469.5	405.9	298.5	257.7
60°	303.9	416.7	352.5	240.6	218.8
62.5°	282.8	373.5	300.6	213.4	209.1
65°	251.2	314.6	226.9	194.4	192.4
67.5°	221.6	258.4	173.0	175.0	173.0
70°	200.5	218.4	160.0	162.0	160.0
72.5°	181.1	179.9	147.1	145.8	143.8
75°	147.9	130.0	125.6	123.5	121.5
77.5°	113.0	96.0	101.3	99.2	97.2
80°	87.1	81.2	85.1	83.0	81.0
82.5°	64.4	66.4	68.9	65.2	63.2
85°	32.4	44.3	44.6	40.5	38.5
87.5°	9.7	19.7	18.8	15.9	14.4
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.3
95°	18.6	34.5	18.6	21.0	25.5
97.5°	33.0	66.1	136.5	40.3	34.8
100°	44.1	82.7	274.0	80.7	53.4
102.5°	55.3	95.7	370.6	212.8	116.6
105°	72.0	110.6	420.3	536.9	355.3
107.5°	88.7	117.8	401.2	781.4	731.9
110°	99.8	127.1	390.1	821.1	882.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.0	138.2	378.9	797.9	900.9
115°	127.7	155.0	362.2	752.9	880.0
117.5°	144.9	171.7	358.0	704.2	835.0
120°	157.9	182.9	350.6	667.2	803.4
122.5°	167.2	194.0	341.3	635.4	760.7
125°	183.4	208.4	341.3	596.9	705.9
127.5°	196.9	222.3	341.8	552.3	659.9
130°	204.3	231.6	343.7	522.4	624.6
132.5°	213.6	240.9	343.7	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)