

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: P621841

Luminaire Tested: VLT-FB-100U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621841
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-100U-050D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

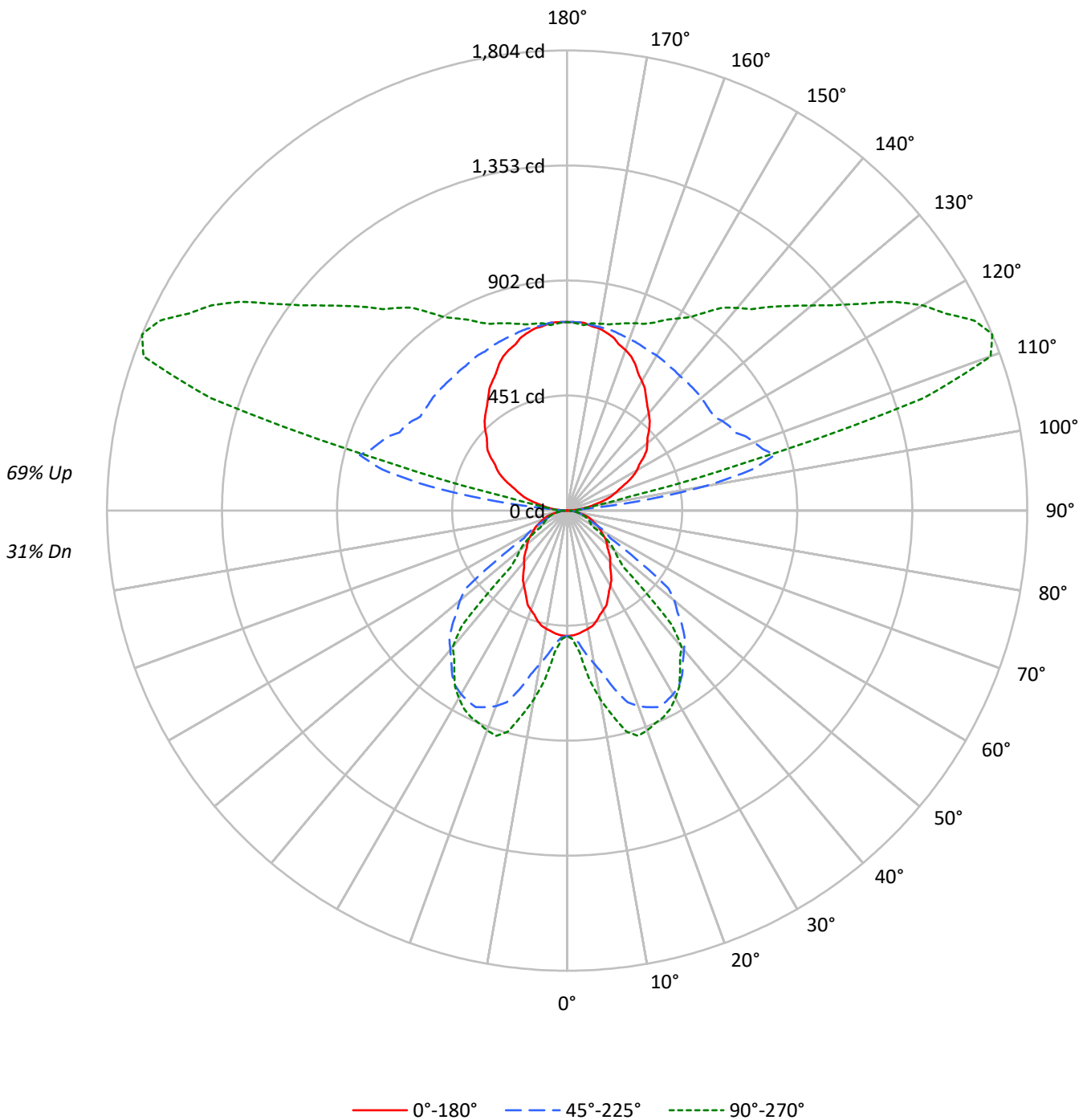
Lumens per Lamp: N/A
Luminaire Lumens: 5734.6 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
Input Voltage (V): 120
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: 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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31				
1	94	90	86	83	84	81	78	75	64	62	60	49	47	46	34	34	33	27				
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	28	23				
3	78	70	63	57	70	63	57	52	50	46	43	38	36	34	28	26	25	20				
4	72	62	54	49	64	56	49	44	45	40	37	34	31	29	25	23	21	17				
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	22	20	19	15				
6	61	49	41	36	54	45	38	33	36	31	28	28	25	22	20	18	17	13				
7	56	44	37	31	50	40	34	29	33	28	24	25	22	19	19	16	15	12				
8	52	40	33	28	47	37	30	26	30	25	21	23	20	17	17	15	13	11				
9	48	36	29	25	43	33	27	23	27	22	19	21	18	15	16	14	12	10				
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3528	3528	3528
5°	3498	3749	4016
10°	3429	4434	5474
15°	3325	5403	6665
20°	3166	6226	7004
25°	2998	6732	7072
30°	2806	6887	7037
35°	2617	6888	6757
40°	2462	6673	6542
45°	2342	6469	3133
50°	2275	6123	2699
55°	2212	4100	2137
60°	2151	2494	1549
65°	2104	1900	1611
70°	2075	1655	1655
75°	2021	1716	1661
80°	1777	1736	1653
85°	1317	1811	1564

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 6469 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	0.9
10°-20°	195.5	3.4
20°-30°	331.0	5.8
30°-40°	401.6	7.0
40°-50°	353.5	6.2
50°-60°	218.7	3.8
60°-70°	118.6	2.1
70°-80°	67.5	1.2
80°-90°	23.8	0.4
90°-100°	90.9	1.6
100°-110°	647.7	11.3
110°-120°	879.4	15.3
120°-130°	715.7	12.5
130°-140°	575.6	10.0
140°-150°	453.8	7.9
150°-160°	331.8	5.8
160°-170°	206.1	3.6
170°-180°	70.3	1.2
0°-30°	579.5	10.1
0°-40°	981.1	17.1
0°-60°	1553.3	27.1
0°-90°	1763.2	30.7
90°-120°	1618.0	28.2
90°-150°	3363.2	58.6
90°-180°	3971.0	69.2
0°-180°	5734.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	486	501	520	543	558	46
15°	448	516	727	860	897	125
25°	379	518	850	876	893	174
35°	299	480	786	775	771	187
45°	231	395	637	540	309	179
55°	177	276	328	189	171	158
65°	124	155	112	96	95	123
75°	73	64	62	61	60	76
85°	16	22	22	20	19	19
90°	0	4	9	14	14	2
95°	37	69	37	42	51	42
105°	144	221	842	1075	711	152
115°	256	310	725	1508	1762	254
125°	367	417	684	1195	1414	326
135°	456	506	688	984	1130	351
145°	539	585	693	858	949	339
155°	632	655	707	777	814	290
165°	702	711	725	744	758	197
175°	739	744	739	735	730	70
180°	739	739	739	739	739	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.6	491.6	491.6	491.6	491.6
2.5°	490.0	495.4	498.0	502.8	505.1
5°	485.6	501.2	520.5	542.8	557.5
7.5°	477.8	505.7	566.9	637.3	667.4
10°	470.6	508.7	608.5	710.3	751.3
12.5°	462.6	511.6	657.2	780.6	822.5
15°	447.6	516.0	727.3	860.1	897.2
17.5°	428.2	518.7	788.1	902.1	926.0
20°	414.6	519.2	815.3	907.4	917.2
22.5°	401.8	519.7	834.4	894.6	902.8
25°	378.7	518.4	850.2	875.6	893.2
27.5°	355.5	512.6	842.4	862.9	875.6
30°	338.7	506.7	831.2	848.3	849.2
32.5°	322.7	497.0	814.5	819.4	818.1
35°	298.7	480.4	786.3	775.2	771.3
37.5°	276.4	458.4	745.1	727.3	726.3
40°	262.8	442.5	712.4	695.4	698.4
42.5°	250.0	424.3	682.8	663.0	608.1
45°	230.8	394.9	637.4	540.2	308.7
47.5°	214.2	361.5	586.1	289.4	265.8
50°	203.8	338.6	548.5	254.5	241.8
52.5°	193.4	317.3	499.7	228.8	212.2
55°	176.8	275.5	327.7	189.4	170.8
57.5°	161.1	231.6	200.2	147.2	127.1
60°	149.9	205.5	173.8	118.6	107.9
62.5°	139.5	184.2	148.3	105.3	103.1
65°	123.9	155.1	111.9	95.9	94.9
67.5°	109.3	127.5	85.3	86.3	85.3
70°	98.9	107.7	78.9	79.9	78.9
72.5°	89.3	88.7	72.5	71.9	70.9
75°	72.9	64.1	61.9	60.9	59.9
77.5°	55.7	47.3	50.0	48.9	48.0
80°	43.0	40.0	42.0	40.9	40.0
82.5°	31.8	32.7	34.0	32.1	31.2
85°	16.0	21.8	22.0	20.0	19.0
87.5°	4.8	10.4	10.7	10.0	9.2
90°	0.0	4.5	9.3	13.9	13.9
92.5°	11.2	15.7	20.5	28.9	32.5
95°	37.2	69.0	37.2	42.1	51.1
97.5°	66.0	132.4	273.4	80.7	69.7
100°	88.3	165.6	548.7	161.5	106.9
102.5°	110.7	191.6	742.1	426.2	233.4
105°	144.1	221.4	841.6	1075.1	711.4
107.5°	177.6	235.8	803.5	1564.7	1465.6
110°	199.9	254.5	781.2	1644.2	1766.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.3	276.8	758.9	1597.7	1804.1
115°	255.7	310.3	725.4	1507.7	1762.3
117.5°	290.1	343.8	717.0	1410.2	1672.1
120°	316.2	366.2	702.1	1336.0	1608.8
122.5°	334.8	388.4	683.5	1272.3	1523.3
125°	367.3	417.3	683.5	1195.3	1413.5
127.5°	394.3	445.2	684.5	1106.0	1321.5
130°	409.2	463.7	688.2	1046.2	1250.8
132.5°	427.8	482.3	688.2	1019.3	1187.6
135°	455.7	505.7	688.2	984.4	1129.9
137.5°	478.9	532.6	688.2	945.8	1070.4
140°	497.5	547.5	688.2	923.2	1036.9
142.5°	516.1	562.5	691.9	897.0	1003.4
145°	539.4	584.8	692.8	857.6	948.6
147.5°	567.3	607.3	698.4	829.3	899.3
150°	585.9	622.3	702.1	810.4	869.5
152.5°	604.5	637.2	702.1	795.3	843.5
155°	632.4	655.1	706.8	777.3	813.7
157.5°	654.7	676.5	712.4	766.0	792.3
160°	669.6	687.8	716.1	758.4	781.2
162.5°	680.7	698.9	719.8	754.6	770.0
165°	702.1	711.2	725.4	744.3	757.9
167.5°	714.2	722.4	730.0	739.5	747.7
170°	725.4	729.9	730.0	739.4	744.0
172.5°	729.1	737.3	733.7	735.7	740.3
175°	739.3	743.9	739.3	734.6	730.0
177.5°	739.3	743.0	739.3	739.2	735.6
180°	739.3	739.3	739.3	739.3	739.3

(END OF REPORT)