

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: P621889

Luminaire Tested: VLT-FB-150U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621889
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-150U-050D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

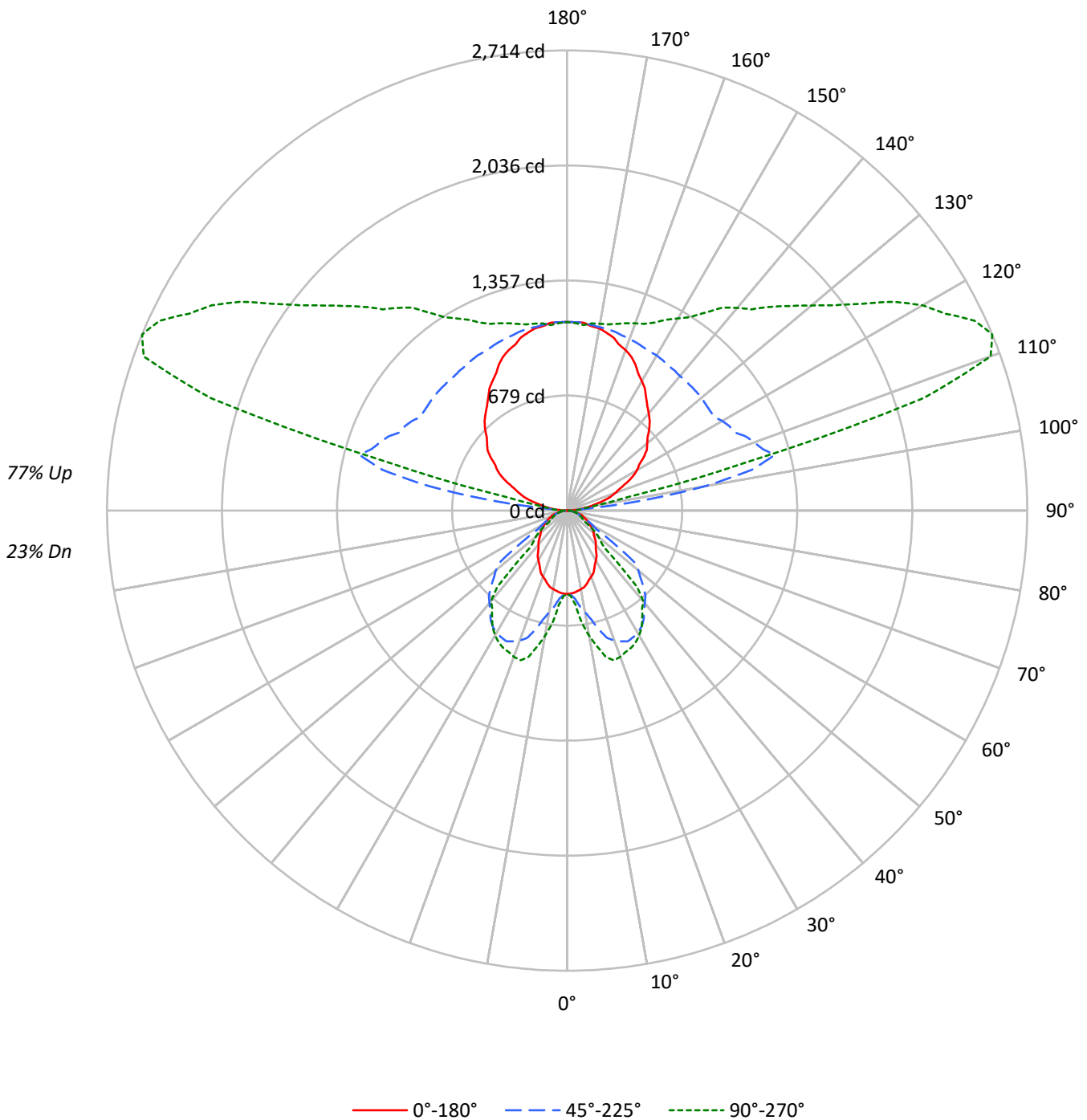
Lumens per Lamp: N/A
Luminaire Lumens: 7737.9 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63
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



TEST NUMBER: P621889
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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	88	84	81	82	78	75	73	60	58	56	43	42	41	28	27	27	20
2	84	77	71	67	74	69	64	60	53	50	47	38	36	35	25	24	23	17
3	77	68	61	56	68	61	55	50	47	43	40	34	32	30	22	21	20	15
4	70	60	53	47	62	54	47	43	42	37	34	30	28	25	20	18	17	13
5	64	53	46	40	57	48	41	36	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	25	22	19	16	15	13	10
7	55	43	35	30	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	50	39	32	27	45	35	29	24	27	23	20	20	17	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	17	19	16	13	13	11	9	7
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9	6

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	0.7
10°-20°	195.5	2.5
20°-30°	331.0	4.3
30°-40°	401.6	5.2
40°-50°	353.5	4.6
50°-60°	218.7	2.8
60°-70°	118.6	1.5
70°-80°	67.5	0.9
80°-90°	24.6	0.3
90°-100°	136.7	1.8
100°-110°	974.3	12.6
110°-120°	1322.8	17.1
120°-130°	1076.6	13.9
130°-140°	865.9	11.2
140°-150°	682.6	8.8
150°-160°	499.1	6.5
160°-170°	310.0	4.0
170°-180°	105.7	1.4
0°-30°	579.5	7.5
0°-40°	981.1	12.7
0°-60°	1553.3	20.1
0°-90°	1764.0	22.8
90°-120°	2433.8	31.5
90°-150°	5059.0	65.4
90°-180°	5974.0	77.2
0°-180°	7737.9	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	7	14	21	21	3
95°	56	104	56	63	77	63
105°	217	333	1266	1617	1070	229
115°	385	467	1091	2268	2651	382
125°	553	628	1028	1798	2126	491
135°	685	761	1035	1481	1700	527
145°	811	880	1042	1290	1427	510
155°	951	985	1063	1169	1224	437
165°	1056	1070	1091	1120	1140	297
175°	1112	1119	1112	1105	1098	105
180°	1112	1112	1112	1112	1112	



TEST NUMBER: P621889

CATALOG NUMBER: VLT-FB-150U-050D-830-UNV-STD-W-4

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	10.9	11.6	11.4	10.6
90°	0.0	6.8	14.0	21.0	21.0
92.5°	16.8	23.6	30.8	43.5	49.0
95°	56.0	103.8	56.0	63.3	76.9
97.5°	99.3	199.2	411.3	121.3	104.9
100°	132.9	249.2	825.3	242.9	160.9
102.5°	166.5	288.2	1116.3	641.1	351.1
105°	216.8	333.1	1266.0	1617.2	1070.1
107.5°	267.2	354.7	1208.6	2353.7	2204.6
110°	300.8	382.8	1175.0	2473.2	2657.8



TEST NUMBER: P621889

CATALOG NUMBER: VLT-FB-150U-050D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	334.3	416.4	1141.5	2403.3	2713.8
115°	384.7	466.8	1091.1	2267.9	2650.8
117.5°	436.4	517.1	1078.5	2121.2	2515.2
120°	475.6	550.8	1056.1	2009.7	2420.0
122.5°	503.6	584.3	1028.2	1913.8	2291.3
125°	552.6	627.8	1028.2	1798.0	2126.3
127.5°	593.1	669.7	1029.6	1663.6	1987.8
130°	615.5	697.6	1035.2	1573.7	1881.5
132.5°	643.5	725.5	1035.2	1533.3	1786.3
135°	685.4	760.7	1035.2	1480.8	1699.6
137.5°	720.4	801.1	1035.2	1422.7	1610.1
140°	748.4	823.6	1035.2	1388.8	1559.7
142.5°	776.4	846.1	1040.8	1349.3	1509.4
145°	811.3	879.7	1042.2	1290.1	1426.8
147.5°	853.3	913.5	1050.5	1247.4	1352.7
150°	881.3	936.0	1056.1	1219.0	1307.9
152.5°	909.3	958.5	1056.1	1196.3	1268.8
155°	951.2	985.4	1063.1	1169.3	1224.0
157.5°	984.8	1017.6	1071.5	1152.2	1191.8
160°	1007.2	1034.5	1077.1	1140.8	1175.0
162.5°	1024.0	1051.3	1082.7	1135.0	1158.3
165°	1056.1	1069.8	1091.1	1119.6	1140.1
167.5°	1074.3	1086.6	1098.1	1112.4	1124.7
170°	1091.1	1098.0	1098.1	1112.3	1119.1
172.5°	1096.7	1109.0	1103.7	1106.7	1113.5
175°	1112.1	1118.9	1112.1	1104.9	1098.1
177.5°	1112.1	1117.6	1112.1	1112.0	1106.5
180°	1112.1	1112.1	1112.1	1112.1	1112.1

(END OF REPORT)