

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: P621787

Luminaire Tested: VLT-FB-050U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621787
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-125D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - BATWING
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

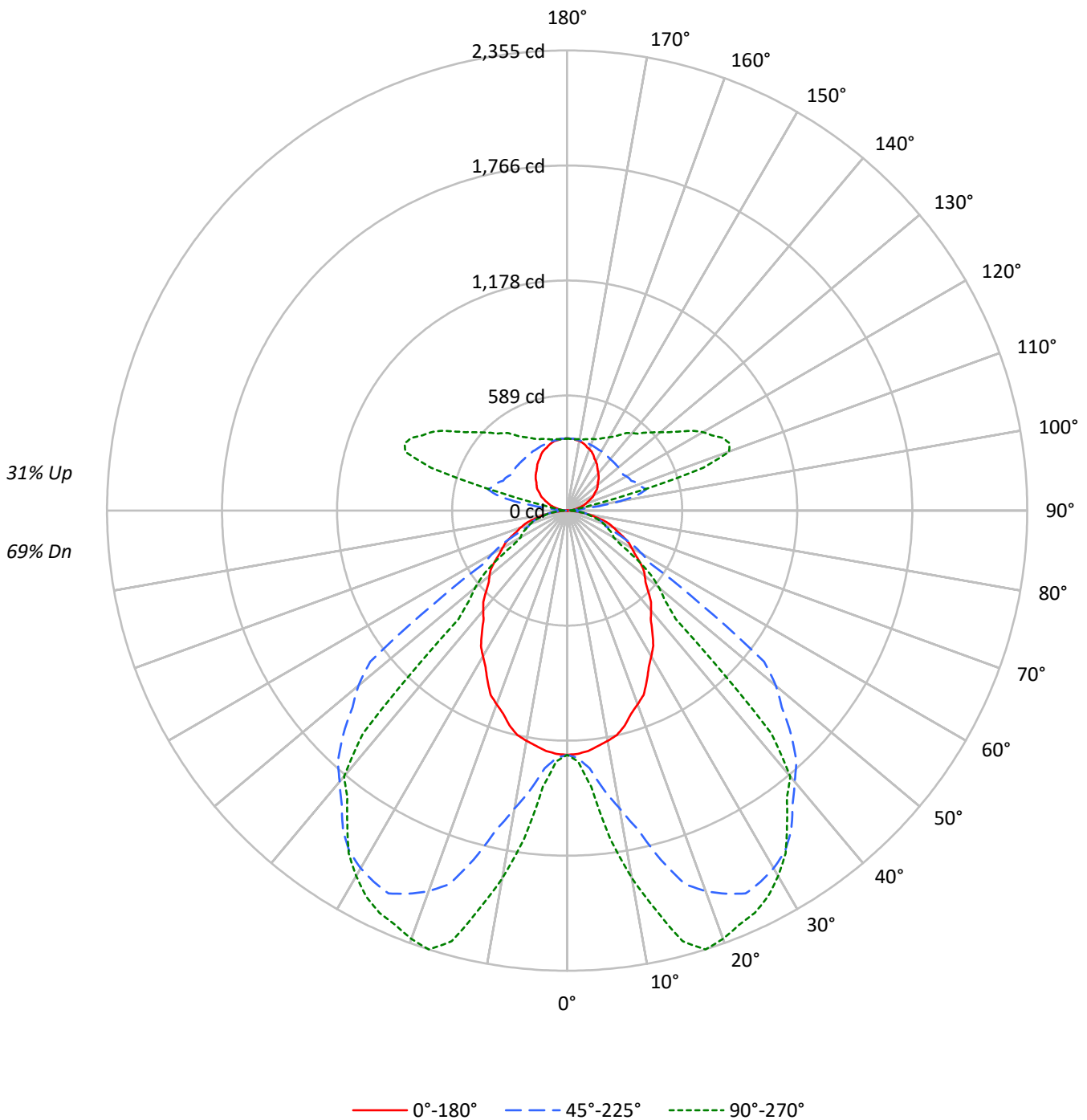
Lumens per Lamp: N/A
Luminaire Lumens: 6462.3 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.3
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: P621787
CATALOG NUMBER: VLT-FB-050U-125D-830-UNV-STD-W-4

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	69																			
1	103	99	95	92	97	94	90	87	84	81	79	75	73	71	67	65	64	60																			
2	94	87	81	76	89	83	78	73	75	70	67	67	64	61	60	57	55	52																			
3	87	78	70	65	82	74	67	62	66	61	57	60	56	53	54	51	48	45																			
4	80	69	61	55	75	66	59	53	60	54	50	54	49	46	48	45	42	39																			
5	74	62	54	48	69	59	52	46	54	48	43	49	44	40	44	40	37	34																			
6	68	56	48	42	64	53	46	41	49	43	38	44	39	35	40	36	33	30																			
7	63	51	43	37	60	48	41	36	44	38	34	40	35	31	37	32	29	27																			
8	59	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24																			
9	55	42	35	30	52	41	34	29	37	31	27	34	29	25	31	27	24	22																			
10	51	39	32	27	48	37	31	26	34	28	24	31	26	23	29	25	22	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8971	8971	8971
5°	8895	9536	10214
10°	8721	11275	13923
15°	8457	13742	16952
20°	8053	15833	17813
25°	7625	17121	17986
30°	7138	17518	17896
35°	6655	17518	17184
40°	6260	16971	16638
45°	5957	16451	7968
50°	5787	15573	6865
55°	5626	10427	5436
60°	5470	6345	3938
65°	5350	4832	4099
70°	5279	4211	4211
75°	5143	4367	4228
80°	4517	4409	4199
85°	3351	4603	3977

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 16451 cd/sqm



TEST NUMBER: P621787

CATALOG NUMBER: VLT-FB-050U-125D-830-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	2.1
10°-20°	497.1	7.7
20°-30°	841.9	13.0
30°-40°	1021.3	15.8
40°-50°	899.0	13.9
50°-60°	556.3	8.6
60°-70°	301.6	4.7
70°-80°	171.8	2.7
80°-90°	57.0	0.9
90°-100°	45.4	0.7
100°-110°	323.2	5.0
110°-120°	438.7	6.8
120°-130°	357.1	5.5
130°-140°	287.2	4.4
140°-150°	226.4	3.5
150°-160°	165.6	2.6
160°-170°	102.8	1.6
170°-180°	35.1	0.5
0°-30°	1473.8	22.8
0°-40°	2495.2	38.6
0°-60°	3950.4	61.1
0°-90°	4480.9	69.3
90°-120°	807.3	12.5
90°-150°	1677.9	26.0
90°-180°	1981.0	30.7
0°-180°	6462.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1235	1275	1324	1381	1418	117
15°	1138	1312	1850	2187	2282	319
25°	963	1318	2162	2227	2272	442
35°	760	1222	2000	1972	1962	476
45°	587	1004	1621	1374	785	455
55°	450	701	833	482	434	403
65°	315	395	285	244	241	313
75°	186	163	158	155	152	194
85°	41	56	56	51	48	50
90°	0	2	5	7	7	2
95°	19	34	19	21	26	21
105°	72	110	420	536	355	76
115°	128	155	362	752	879	127
125°	183	208	341	596	705	163
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	



TEST NUMBER: P621787

CATALOG NUMBER: VLT-FB-050U-125D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1250.2	1250.2	1250.2	1250.2	1250.2
2.5°	1246.1	1260.0	1266.4	1278.7	1284.7
5°	1234.9	1274.7	1323.8	1380.6	1417.9
7.5°	1215.1	1286.1	1441.7	1620.8	1697.4
10°	1196.8	1293.7	1547.4	1806.5	1910.8
12.5°	1176.5	1301.2	1671.4	1985.4	2091.7
15°	1138.3	1312.3	1849.8	2187.4	2281.8
17.5°	1089.1	1319.1	2004.3	2294.3	2355.0
20°	1054.5	1320.3	2073.4	2307.8	2332.6
22.5°	1022.0	1321.6	2122.2	2275.1	2296.0
25°	963.0	1318.3	2162.4	2226.9	2271.6
27.5°	904.1	1303.6	2142.5	2194.6	2226.9
30°	861.4	1288.7	2114.1	2157.3	2159.8
32.5°	820.7	1264.0	2071.4	2084.0	2080.5
35°	759.7	1221.9	1999.7	1971.6	1961.6
37.5°	702.8	1165.9	1895.0	1849.8	1847.3
40°	668.3	1125.4	1811.7	1768.7	1776.1
42.5°	635.7	1079.0	1736.5	1686.1	1546.4
45°	587.0	1004.4	1621.1	1374.0	785.2
47.5°	544.8	919.4	1490.5	736.0	675.9
50°	518.4	861.2	1395.0	647.2	614.9
52.5°	491.9	807.0	1271.0	581.9	539.7
55°	449.7	700.7	833.4	481.7	434.5
57.5°	409.6	589.0	509.2	374.4	323.2
60°	381.1	522.8	442.1	301.8	274.4
62.5°	354.7	468.5	377.1	267.7	262.2
65°	315.1	394.6	284.6	243.9	241.4
67.5°	278.0	324.2	217.0	219.5	217.0
70°	251.6	273.9	200.7	203.2	200.7
72.5°	227.2	225.7	184.5	182.9	180.4
75°	185.5	163.1	157.5	154.9	152.5
77.5°	141.8	120.4	127.0	124.5	122.0
80°	109.3	101.8	106.7	104.1	101.6
82.5°	80.8	83.3	86.4	81.8	79.3
85°	40.7	55.6	55.9	50.8	48.3
87.5°	12.2	24.6	23.3	19.6	17.7
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.2
95°	18.6	34.4	18.6	21.0	25.5
97.5°	32.9	66.1	136.4	40.2	34.8
100°	44.1	82.6	273.7	80.6	53.4
102.5°	55.2	95.6	370.3	212.6	116.5
105°	71.9	110.5	419.9	536.4	354.9
107.5°	88.6	117.7	400.9	780.7	731.2
110°	99.8	127.0	389.7	820.3	881.6



TEST NUMBER: P621787

CATALOG NUMBER: VLT-FB-050U-125D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.9	138.1	378.6	797.1	900.1
115°	127.6	154.8	361.9	752.2	879.2
117.5°	144.8	171.5	357.7	703.6	834.2
120°	157.8	182.7	350.3	666.6	802.7
122.5°	167.0	193.8	341.0	634.8	760.0
125°	183.3	208.2	341.0	596.4	705.2
127.5°	196.7	222.1	341.5	551.8	659.3
130°	204.2	231.4	343.3	522.0	624.1
132.5°	213.4	240.6	343.3	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9

(END OF REPORT)