

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: P621987

Luminaire Tested: VLT-BB-M-150U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621987
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-26)
Test Lab: INNOVATION CENTER
Issue Date: 10/28/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-BB-M-150U-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

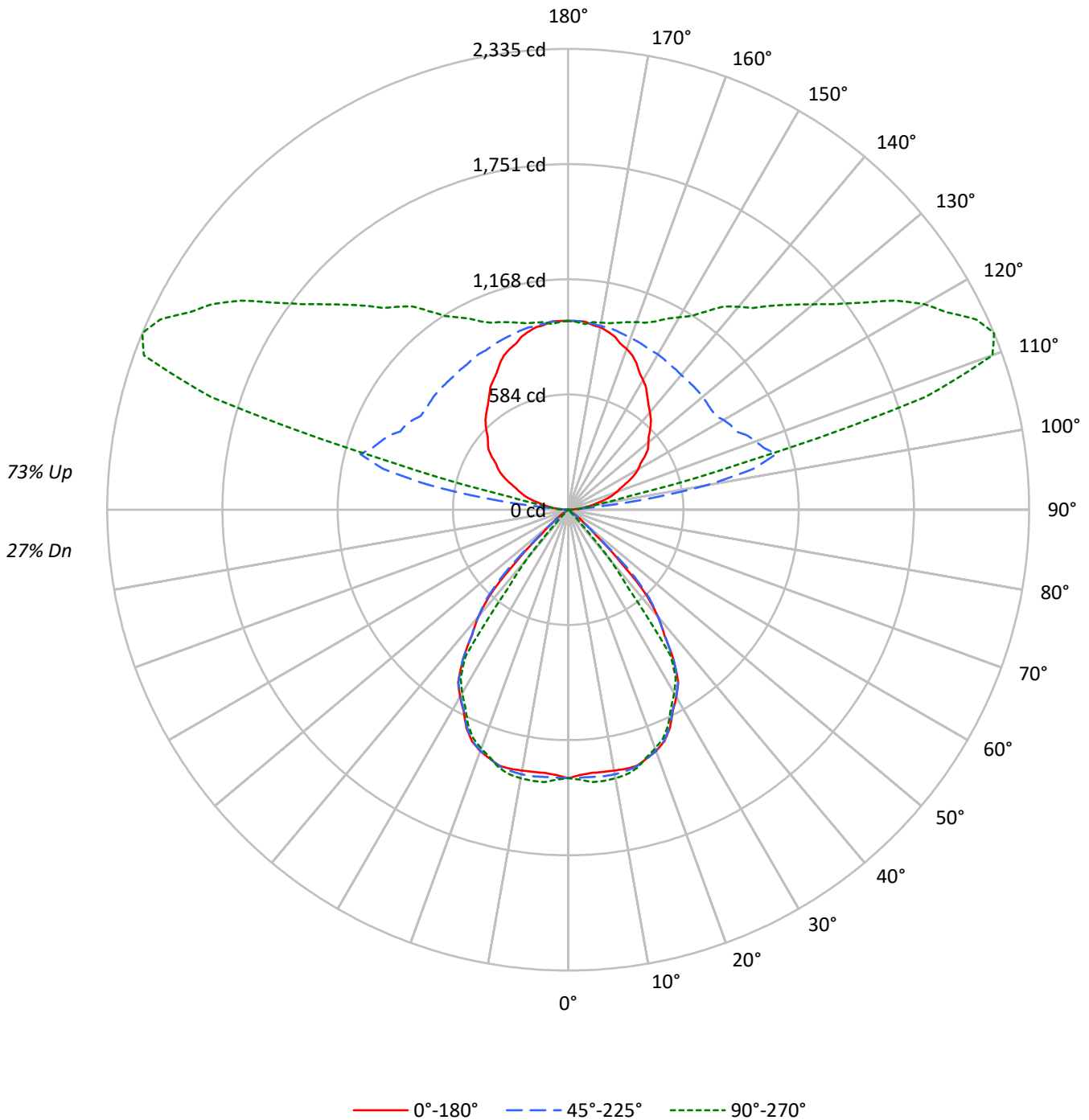
Lumens per Lamp: N/A
Luminaire Lumens: 7015.1 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.6
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	0
RCR																		
0	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27
1	94	90	87	84	84	81	78	75	63	61	60	47	46	45	32	32	31	25
2	86	80	75	70	77	72	67	64	57	54	51	43	41	40	30	29	28	23
3	79	71	65	60	71	64	59	55	51	48	45	39	37	35	28	27	26	21
4	73	64	57	52	66	58	52	47	46	42	39	36	33	31	26	24	23	19
5	68	57	50	45	61	52	46	42	42	38	35	33	30	28	24	22	21	17
6	63	52	45	40	56	47	41	37	38	34	31	30	27	25	22	20	19	16
7	58	47	40	35	52	43	37	33	35	31	27	27	25	22	20	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	25	22	20	19	17	16	14
9	50	39	33	28	45	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	27	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9761	9761	9761
5°	9645	9791	9980
10°	9778	9919	10066
15°	9977	10000	10060
20°	9938	9922	9830
25°	9653	9613	9501
30°	9077	9060	8892
35°	8157	8165	7935
40°	6623	6623	3031
45°	3809	4632	62
50°	1200	1110	57
55°	419	89	51
60°	29	59	59
65°	17	51	51
70°	21	63	63
75°	0	55	55
80°	0	83	83
85°	0	82	82

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4632 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	1.9
10°-20°	379.3	5.4
20°-30°	554.0	7.9
30°-40°	548.7	7.8
40°-50°	229.7	3.3
50°-60°	24.6	0.4
60°-70°	3.4	0.0
70°-80°	2.1	0.0
80°-90°	3.1	0.0
90°-100°	117.7	1.7
100°-110°	838.3	12.0
110°-120°	1138.2	16.2
120°-130°	926.4	13.2
130°-140°	745.1	10.6
140°-150°	587.4	8.4
150°-160°	429.5	6.1
160°-170°	266.8	3.8
170°-180°	91.0	1.3
0°-30°	1063.3	15.2
0°-40°	1612.0	23.0
0°-60°	1866.3	26.6
0°-90°	1875.0	26.7
90°-120°	2094.2	29.9
90°-150°	4353.0	62.1
90°-180°	5140.0	73.3
0°-180°	7015.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1339	1363	1359	1363	1386	128
15°	1343	1371	1346	1336	1354	377
25°	1219	1240	1214	1185	1200	557
35°	931	933	932	914	906	571
45°	375	446	456	9	6	294
55°	34	44	7	5	4	38
65°	1	4	3	3	3	1
75°	0	2	2	2	2	0
85°	0	1	1	1	1	0
90°	0	6	12	18	18	2
95°	48	89	48	54	66	54
105°	187	287	1089	1392	921	197
115°	331	402	939	1951	2281	329
125°	475	540	885	1547	1830	422
135°	590	654	891	1274	1462	454
145°	698	757	897	1110	1228	438
155°	818	848	915	1006	1053	376
165°	909	920	939	963	981	255
175°	957	963	957	951	945	90
180°	957	957	957	957	957	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1360.2	1360.2	1360.2	1360.2	1360.2
2.5°	1345.6	1364.6	1358.6	1357.2	1369.1
5°	1338.9	1362.7	1359.2	1362.7	1385.5
7.5°	1339.5	1361.5	1362.8	1362.7	1385.5
10°	1341.9	1364.7	1361.2	1358.7	1381.5
12.5°	1345.2	1368.8	1355.5	1351.3	1373.4
15°	1342.9	1370.7	1346.0	1336.2	1354.1
17.5°	1322.4	1354.6	1322.0	1303.3	1316.4
20°	1301.4	1335.1	1299.3	1273.3	1287.2
22.5°	1271.3	1302.7	1268.5	1238.4	1254.7
25°	1219.2	1240.0	1214.1	1185.0	1199.9
27.5°	1148.2	1160.1	1145.4	1119.2	1128.3
30°	1095.4	1103.4	1093.4	1067.2	1073.1
32.5°	1037.0	1041.0	1035.0	1011.1	1013.9
35°	931.1	933.1	932.1	913.7	905.8
37.5°	800.3	804.3	801.9	721.8	498.0
40°	707.0	710.9	707.0	422.7	323.6
42.5°	590.1	615.5	608.8	288.3	92.3
45°	375.3	445.7	456.4	9.1	6.1
47.5°	185.4	261.4	214.6	5.9	5.9
50°	107.5	154.1	99.4	5.1	5.1
52.5°	71.8	93.8	28.8	5.1	5.1
55°	33.5	44.4	7.1	5.0	4.1
57.5°	11.8	22.3	4.9	4.1	4.1
60°	2.0	11.0	4.1	4.1	4.1
62.5°	1.2	6.2	4.1	3.3	4.1
65°	1.0	4.0	3.0	3.0	3.0
67.5°	1.0	3.0	3.0	3.0	3.0
70°	1.0	3.0	3.0	3.0	3.0
72.5°	0.2	2.2	2.2	2.2	3.0
75°	0.0	2.0	2.0	2.0	2.0
77.5°	0.0	2.0	2.0	2.0	2.0
80°	0.0	2.0	2.0	2.0	2.0
82.5°	0.0	1.2	1.2	1.2	2.0
85°	0.0	1.0	1.0	1.0	1.0
87.5°	0.0	2.0	3.2	4.4	4.4
90°	0.0	5.9	12.0	18.1	18.1
92.5°	14.4	20.3	26.5	37.4	42.1
95°	48.1	89.3	48.1	54.4	66.2
97.5°	85.5	171.4	353.9	104.4	90.3
100°	114.3	214.4	710.2	209.0	138.4
102.5°	143.2	248.0	960.5	551.6	302.1
105°	186.6	286.6	1089.3	1391.5	920.8
107.5°	229.9	305.2	1039.9	2025.2	1896.9
110°	258.8	329.4	1011.1	2128.0	2286.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.7	358.3	982.2	2067.9	2335.1
115°	331.0	401.6	938.8	1951.4	2280.9
117.5°	375.5	445.0	928.0	1825.2	2164.2
120°	409.2	474.0	908.8	1729.2	2082.3
122.5°	433.3	502.7	884.7	1646.7	1971.6
125°	475.4	540.2	884.7	1547.1	1829.5
127.5°	510.3	576.3	885.9	1431.5	1710.4
130°	529.6	600.2	890.7	1354.1	1618.9
132.5°	553.7	624.3	890.7	1319.3	1537.1
135°	589.8	654.5	890.7	1274.1	1462.4
137.5°	619.9	689.3	890.7	1224.2	1385.4
140°	643.9	708.7	890.7	1195.0	1342.1
142.5°	668.0	728.0	895.5	1161.0	1298.7
145°	698.1	757.0	896.7	1110.0	1227.7
147.5°	734.2	786.0	903.9	1073.3	1163.9
150°	758.3	805.4	908.8	1048.9	1125.4
152.5°	782.4	824.7	908.8	1029.3	1091.7
155°	818.5	847.9	914.8	1006.1	1053.2
157.5°	847.4	875.6	922.0	991.4	1025.5
160°	866.6	890.2	926.8	981.6	1011.1
162.5°	881.1	904.6	931.6	976.6	996.6
165°	908.8	920.5	938.8	963.3	981.0
167.5°	924.4	935.0	944.9	957.1	967.7
170°	938.8	944.7	944.9	957.0	962.9
172.5°	943.7	954.2	949.7	952.2	958.1
175°	956.9	962.8	956.9	950.7	944.9
177.5°	956.9	961.6	956.9	956.8	952.1
180°	956.9	956.9	956.9	956.9	956.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00