

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: P853548

Luminaire Tested: SQ2-BBM-125U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853548
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBM-125U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

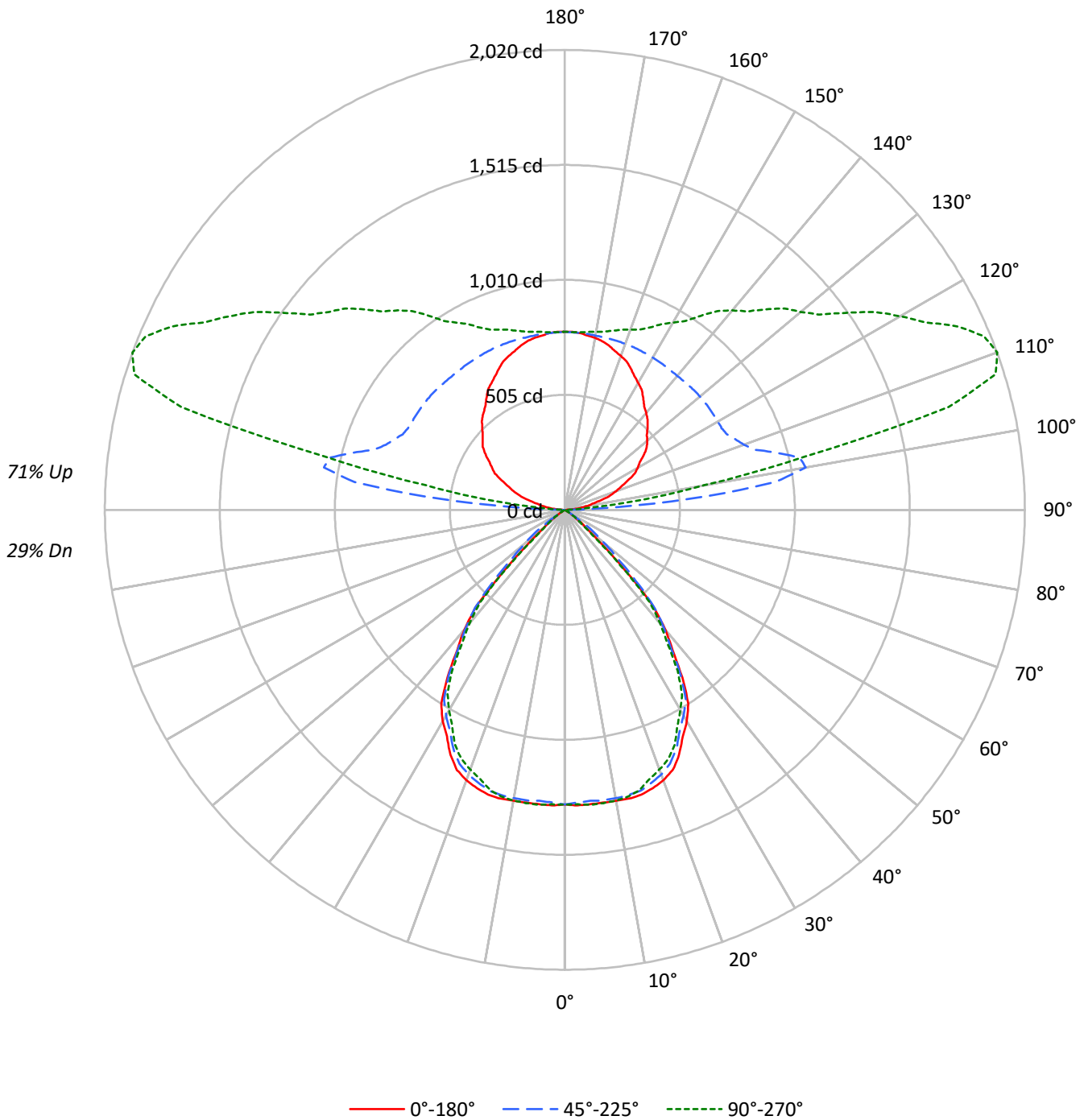
Lumens per Lamp: N/A
Luminaire Lumens: 6756.6 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 62
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26				
2	87	80	75	71	78	72	68	64	58	55	52	44	42	41	31	30	30	24				
3	80	72	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	74	64	57	52	66	58	52	48	47	43	40	36	34	32	27	25	24	20				
5	68	58	50	45	61	52	46	42	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	40	57	47	41	37	39	34	31	30	28	25	23	21	20	17				
7	58	47	40	35	52	43	37	33	35	31	28	28	25	23	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14				
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20893	20893	20893
5°	21034	20801	21067
10°	21277	21089	21263
15°	21661	21372	21275
20°	21722	21258	20861
25°	21150	20635	20311
30°	19982	19443	18923
35°	17712	17503	17010
40°	14459	14254	13687
45°	8524	10061	7930
50°	2876	5606	2562
55°	974	2004	1030
60°	94	591	32
65°	0	38	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 10061 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	1.8
10°-20°	361.9	5.4
20°-30°	532.6	7.9
30°-40°	544.1	8.1
40°-50°	312.8	4.6
50°-60°	54.7	0.8
60°-70°	2.0	0.0
70°-80°	0.0	0.0
80°-90°	1.1	0.0
90°-100°	299.1	4.4
100°-110°	973.7	14.4
110°-120°	963.2	14.3
120°-130°	787.1	11.6
130°-140°	643.3	9.5
140°-150°	501.1	7.4
150°-160°	361.2	5.3
160°-170°	220.8	3.3
170°-180°	74.5	1.1
0°-30°	1018.1	15.1
0°-40°	1562.3	23.1
0°-60°	1929.8	28.6
0°-90°	1933.0	28.6
90°-120°	2236.0	33.1
90°-150°	4167.5	61.7
90°-180°	4824.0	71.4
0°-180°	6756.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1294	1294	1294	1294	1294	
5°	1298	1295	1283	1302	1300	124
15°	1296	1307	1279	1279	1273	365
25°	1187	1198	1158	1146	1140	543
35°	899	903	888	873	863	554
45°	373	434	441	418	347	292
55°	35	41	71	40	37	39
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	3	7	6	6	2
95°	40	123	548	195	120	47
105°	165	239	965	1842	1744	176
115°	306	365	786	1619	1905	303
125°	425	474	775	1278	1507	378
135°	514	567	771	1103	1244	397
145°	600	644	769	950	1040	376
155°	685	707	774	851	883	315
165°	747	754	776	805	814	210
175°	779	779	779	785	783	74
180°	782	782	782	782	782	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1294.0	1294.0	1294.0	1294.0	1294.0
2.5°	1299.4	1296.4	1286.3	1297.8	1294.8
5°	1297.8	1295.0	1283.4	1301.6	1299.8
7.5°	1297.1	1294.8	1287.1	1302.9	1299.2
10°	1297.8	1297.8	1286.3	1300.6	1296.9
12.5°	1299.4	1303.1	1284.0	1295.2	1289.9
15°	1295.9	1307.2	1278.6	1279.4	1272.8
17.5°	1281.9	1297.1	1258.0	1248.7	1238.8
20°	1264.2	1280.2	1237.2	1222.6	1214.1
22.5°	1237.2	1252.5	1207.2	1194.9	1185.7
25°	1187.2	1197.5	1158.3	1145.7	1140.1
27.5°	1121.8	1127.0	1092.9	1079.8	1070.4
30°	1071.8	1071.8	1042.9	1028.2	1015.0
32.5°	1009.4	1006.4	987.5	970.5	958.0
35°	898.6	903.3	888.0	873.3	863.0
37.5°	776.0	780.5	764.8	748.1	741.0
40°	686.0	689.7	676.3	658.8	649.4
42.5°	575.1	595.4	583.2	564.1	551.7
45°	373.3	434.4	440.6	417.9	347.3
47.5°	194.5	258.5	305.6	233.4	163.6
50°	114.5	155.9	223.2	127.4	102.0
52.5°	73.7	91.8	157.0	81.5	68.9
55°	34.6	41.2	71.2	40.3	36.6
57.5°	12.9	19.3	32.1	19.5	14.0
60°	2.9	8.5	18.3	5.7	1.0
62.5°	0.6	2.5	10.6	1.1	0.2
65°	0.0	0.0	1.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.6	1.3	1.2	1.2
90°	0.0	2.8	6.7	5.8	5.8
92.5°	13.8	49.8	159.1	52.4	40.4
95°	40.4	123.1	548.2	195.4	120.2
97.5°	76.0	160.2	930.3	566.6	345.8
100°	99.1	181.8	1074.2	957.9	621.3
102.5°	125.2	205.0	1056.5	1417.1	1077.5
105°	165.4	238.8	964.6	1842.3	1744.5
107.5°	208.9	277.9	877.3	1879.2	1982.8
110°	240.4	303.4	835.7	1833.4	2020.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.6	328.8	809.5	1750.8	1992.0
115°	305.8	365.1	785.7	1619.2	1905.1
117.5°	346.2	399.6	776.5	1498.8	1783.4
120°	369.3	421.9	774.2	1424.8	1700.3
122.5°	391.6	443.5	774.9	1360.5	1617.2
125°	425.1	474.0	775.1	1278.5	1507.0
127.5°	453.7	503.7	774.9	1217.0	1407.5
130°	472.2	523.0	774.2	1181.9	1352.1
132.5°	488.3	541.4	773.4	1149.4	1309.0
135°	513.5	567.1	771.3	1103.4	1244.4
137.5°	538.2	592.1	769.2	1056.7	1181.9
140°	555.9	607.6	768.4	1025.0	1143.4
142.5°	572.8	622.2	768.4	994.7	1100.4
145°	600.1	644.3	769.4	950.3	1040.5
147.5°	626.6	665.0	770.7	912.5	982.3
150°	644.3	678.2	772.2	889.9	949.2
152.5°	662.0	689.9	773.0	872.7	920.0
155°	684.7	707.3	774.2	850.9	882.8
157.5°	706.3	722.4	775.3	834.7	857.1
160°	719.3	732.5	776.1	824.6	842.4
162.5°	730.9	741.0	776.1	816.0	829.4
165°	747.2	753.8	776.1	805.1	814.5
167.5°	758.8	762.9	776.3	797.0	801.9
170°	766.5	768.3	777.0	791.5	793.4
172.5°	771.9	773.0	778.6	788.4	788.0
175°	779.0	779.0	779.0	784.7	782.8
177.5°	781.9	781.1	780.3	784.1	781.1
180°	781.9	781.9	781.9	781.9	781.9



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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