

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: P853642

Luminaire Tested: SQ2-BBN-125U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853642
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-125U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

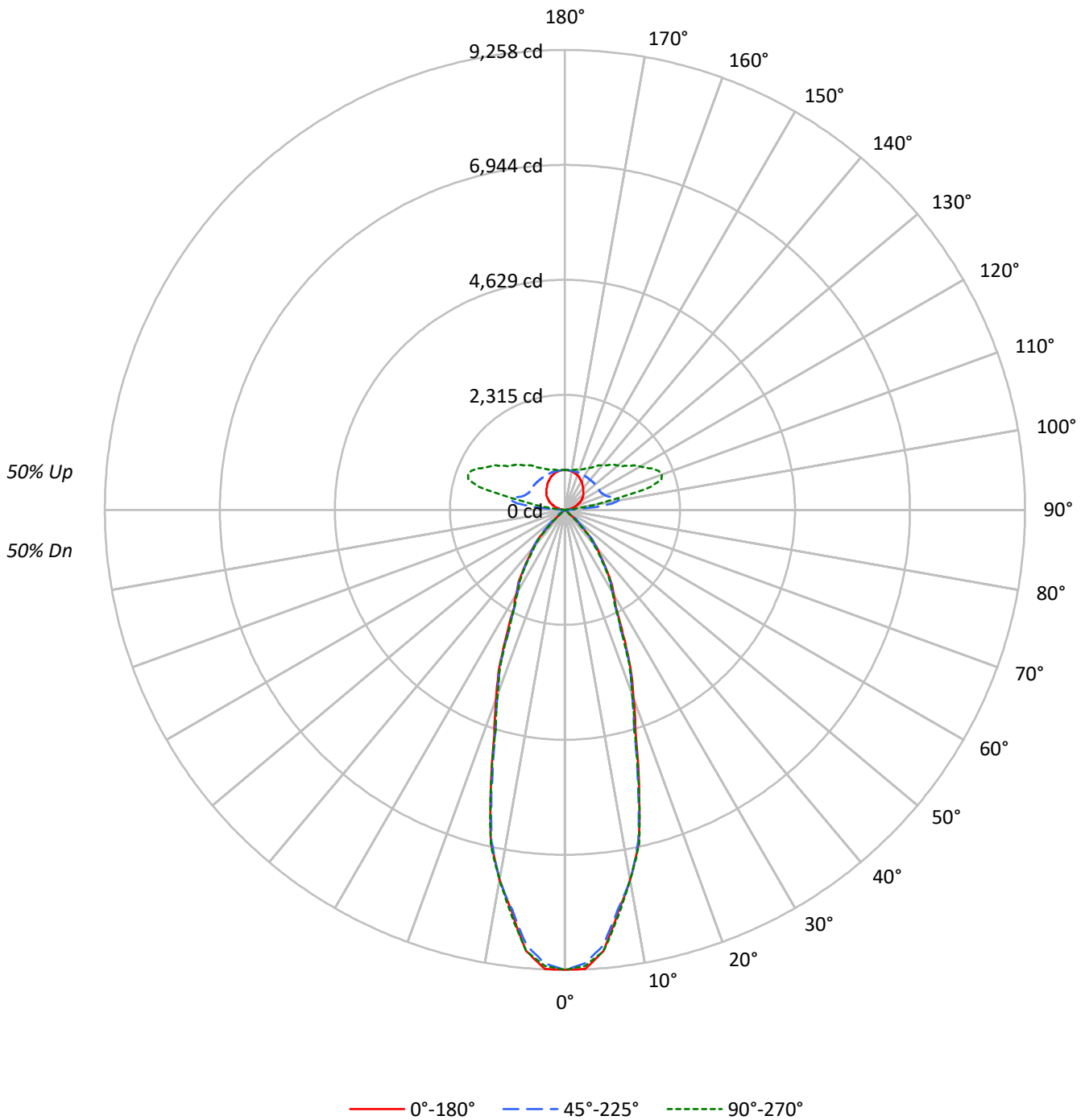
Lumens per Lamp: N/A
Luminaire Lumens: 9958.3 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 93.7
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	100	97	94	91	93	90	87	85	77	75	74	65	64	63	54	53	52	47				
2	94	88	83	79	87	82	78	75	71	68	66	60	59	57	51	50	49	44				
3	88	80	75	70	81	75	70	66	65	62	59	56	54	52	48	46	45	41				
4	82	74	67	63	76	69	64	60	61	57	54	53	50	48	45	44	42	39				
5	77	68	61	56	72	64	58	54	56	52	49	49	46	44	43	41	39	36				
6	72	63	56	51	67	59	53	49	53	48	45	46	43	41	41	39	37	34				
7	68	58	52	47	64	55	49	45	49	45	42	44	41	38	39	36	35	32				
8	64	54	48	43	60	51	46	42	46	42	39	41	38	36	37	34	33	31				
9	61	51	44	40	57	48	43	39	43	39	36	39	36	33	35	33	31	29				
10	58	47	41	37	54	45	40	36	41	37	34	37	34	32	33	31	29	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	149481	149481	149481
5°	144482	142696	144563
10°	123995	124077	123995
15°	96244	94709	96020
20°	69460	68027	67970
25°	49251	47290	47379
30°	36642	35710	35367
35°	28511	27788	27196
40°	21100	20571	19271
45°	10782	13218	8686
50°	2346	7292	1718
55°	659	2959	518
60°	107	594	55
65°	0	65	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: 13218 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	800.6	8.0
10°-20°	1578.3	15.8
20°-30°	1273.2	12.8
30°-40°	884.5	8.9
40°-50°	408.6	4.1
50°-60°	57.4	0.6
60°-70°	2.0	0.0
70°-80°	0.0	0.0
80°-90°	1.2	0.0
90°-100°	307.1	3.1
100°-110°	999.7	10.0
110°-120°	988.9	9.9
120°-130°	808.2	8.1
130°-140°	660.5	6.6
140°-150°	514.5	5.2
150°-160°	370.8	3.7
160°-170°	226.7	2.3
170°-180°	76.5	0.8
0°-30°	3652.1	36.7
0°-40°	4536.6	45.6
0°-60°	5002.5	50.2
0°-90°	5005.7	50.3
90°-120°	2295.8	23.1
90°-150°	4278.9	43.0
90°-180°	4953.0	49.7
0°-180°	9958.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9258	9258	9258	9258	9258	
5°	8914	8867	8804	8913	8920	801
15°	5758	5831	5666	5746	5744	1585
25°	2765	2703	2654	2694	2660	1294
35°	1446	1446	1410	1385	1380	905
45°	472	564	579	526	380	381
55°	23	36	105	30	18	30
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	3	7	6	6	2
95°	42	126	563	201	123	48
105°	170	245	990	1892	1791	181
115°	314	375	807	1663	1956	311
125°	436	487	796	1313	1547	388
135°	527	582	792	1133	1278	407
145°	616	662	790	976	1068	386
155°	703	726	795	874	906	324
165°	767	774	797	827	836	216
175°	800	800	800	806	804	76
180°	803	803	803	803	803	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9258.2	9258.2	9258.2	9258.2	9258.2
2.5°	9252.8	9218.9	9138.0	9210.9	9188.7
5°	8914.5	8867.1	8804.3	8912.9	8919.5
7.5°	8167.7	8183.0	8124.6	8244.5	8231.7
10°	7563.0	7574.4	7568.0	7607.1	7563.0
12.5°	6862.3	6907.6	6821.9	6882.4	6901.0
15°	5757.8	5831.2	5666.0	5746.1	5744.4
17.5°	4722.0	4714.5	4629.2	4644.1	4639.3
20°	4042.6	4031.2	3959.2	3947.7	3955.9
22.5°	3460.7	3441.4	3416.0	3387.2	3397.9
25°	2764.6	2702.6	2654.5	2693.7	2659.5
27.5°	2219.0	2218.0	2178.3	2182.8	2189.3
30°	1965.4	1954.0	1915.4	1916.6	1897.0
32.5°	1739.8	1748.0	1700.5	1691.0	1671.4
35°	1446.5	1446.5	1409.8	1384.7	1379.8
37.5°	1174.6	1171.6	1145.5	1109.9	1097.2
40°	1001.1	992.9	976.0	932.2	914.3
42.5°	803.5	825.4	809.2	765.2	738.1
45°	472.2	563.5	578.9	525.6	380.4
47.5°	202.9	303.4	386.4	251.9	131.1
50°	93.4	171.7	290.3	123.9	68.4
52.5°	54.7	93.9	215.6	72.4	43.0
55°	23.4	36.4	105.1	29.8	18.4
57.5°	8.7	15.9	39.7	12.9	7.0
60°	3.3	6.6	18.4	4.9	1.7
62.5°	0.7	2.6	9.0	2.3	0.3
65°	0.0	0.0	1.7	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	1.4	1.2	1.2
90°	0.0	2.9	6.9	5.9	5.9
92.5°	14.2	51.1	163.3	53.8	41.5
95°	41.5	126.4	562.8	200.7	123.4
97.5°	78.0	164.5	955.2	581.8	355.1
100°	101.7	186.7	1102.9	983.5	637.9
102.5°	128.6	210.4	1084.8	1455.0	1106.3
105°	169.8	245.1	990.4	1891.6	1791.2
107.5°	214.5	285.3	900.7	1929.4	2035.8
110°	246.9	311.5	858.1	1882.4	2074.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	273.7	337.6	831.2	1797.6	2045.3
115°	314.0	374.8	806.7	1662.6	1956.1
117.5°	355.5	410.3	797.2	1538.9	1831.1
120°	379.2	433.2	794.9	1462.9	1745.7
122.5°	402.1	455.4	795.7	1396.9	1660.4
125°	436.4	486.6	795.9	1312.7	1547.3
127.5°	465.9	517.2	795.7	1249.6	1445.2
130°	484.8	537.0	794.9	1213.5	1388.3
132.5°	501.4	555.9	794.1	1180.1	1344.1
135°	527.3	582.3	791.9	1132.9	1277.7
137.5°	552.6	608.0	789.7	1084.9	1213.5
140°	570.7	623.8	788.9	1052.4	1174.0
142.5°	588.1	638.9	788.9	1021.3	1129.8
145°	616.1	661.5	789.9	975.7	1068.4
147.5°	643.4	682.8	791.3	936.9	1008.5
150°	661.6	696.3	792.9	913.7	974.6
152.5°	679.7	708.3	793.7	896.1	944.6
155°	703.0	726.2	794.9	873.6	906.4
157.5°	725.2	741.8	796.1	857.0	880.0
160°	738.6	752.1	796.8	846.6	865.0
162.5°	750.4	760.9	796.8	837.8	851.5
165°	767.2	774.0	796.8	826.7	836.3
167.5°	779.1	783.3	797.0	818.3	823.3
170°	787.0	788.9	797.8	812.7	814.6
172.5°	792.5	793.7	799.4	809.5	809.1
175°	799.8	799.8	799.8	805.7	803.8
177.5°	802.8	802.0	801.2	805.1	802.0
180°	802.8	802.8	802.8	802.8	802.8



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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