

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: P853634

Luminaire Tested: SQ2-BBN-125U-050D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853634
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-050D-940-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

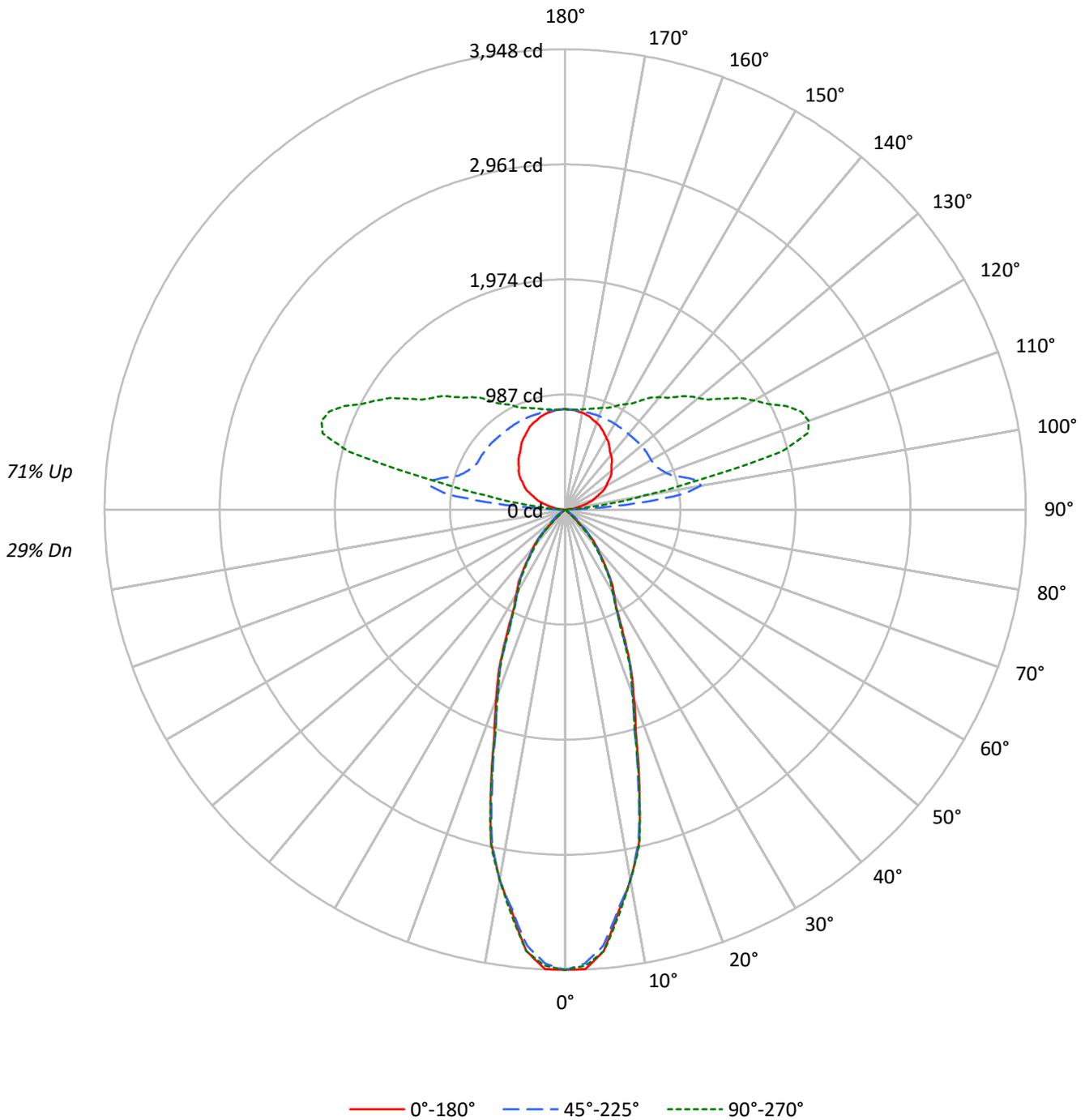
Lumens per Lamp: N/A
Luminaire Lumens: 7440.1 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	0
RCR																		
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	91	88	85	85	82	79	77	65	63	61	49	48	47	34	34	34	27
2	87	81	76	72	78	73	69	65	59	56	53	45	43	42	32	32	31	25
3	81	73	67	62	73	66	61	57	53	50	47	41	39	38	30	29	28	24
4	75	66	59	54	67	60	54	50	49	45	42	38	36	34	29	27	26	22
5	70	60	53	48	63	55	49	44	45	41	38	35	33	31	27	25	24	21
6	65	54	48	43	58	50	44	40	41	37	34	33	30	28	25	24	23	20
7	60	50	43	38	55	46	40	36	38	34	31	31	28	26	24	22	21	18
8	57	46	39	35	51	42	37	33	35	31	28	29	26	24	23	21	20	17
9	53	43	36	32	48	39	34	30	33	29	26	27	24	22	21	20	19	17
10	50	40	33	29	45	37	31	27	31	27	24	25	23	21	20	19	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	63739	63739	63739
5°	61606	60846	61642
10°	52872	52906	52872
15°	41038	40384	40943
20°	29618	29007	28983
25°	21000	20165	20202
30°	15625	15226	15081
35°	12157	11850	11596
40°	8998	8772	8218
45°	4596	5638	3704
50°	1000	3110	733
55°	281	1261	220
60°	45	252	23
65°	0	27	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: 5638 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.4	4.6
10°-20°	673.0	9.0
20°-30°	542.9	7.3
30°-40°	377.2	5.1
40°-50°	174.2	2.3
50°-60°	24.5	0.3
60°-70°	0.8	0.0
70°-80°	0.0	0.0
80°-90°	1.2	0.0
90°-100°	328.9	4.4
100°-110°	1070.9	14.4
110°-120°	1059.3	14.2
120°-130°	865.7	11.6
130°-140°	707.5	9.5
140°-150°	551.1	7.4
150°-160°	397.2	5.3
160°-170°	242.8	3.3
170°-180°	81.9	1.1
0°-30°	1557.3	20.9
0°-40°	1934.4	26.0
0°-60°	2133.1	28.7
0°-90°	2135.2	28.7
90°-120°	2459.0	33.1
90°-150°	4583.3	61.6
90°-180°	5305.0	71.3
0°-180°	7440.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3948	3948	3948	3948	3948	
5°	3801	3781	3754	3800	3803	342
15°	2455	2486	2416	2450	2449	676
25°	1179	1152	1132	1149	1134	552
35°	617	617	601	590	588	386
45°	201	240	247	224	162	163
55°	10	16	45	13	8	13
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°	44	135	603	215	132	52
105°	182	263	1061	2026	1919	194
115°	336	402	864	1781	2095	333
125°	468	521	852	1406	1657	416
135°	565	624	848	1214	1369	436
145°	660	709	846	1045	1144	413
155°	753	778	851	936	971	347
165°	822	829	854	886	896	231
175°	857	857	857	863	861	81
180°	860	860	860	860	860	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3947.7	3947.7	3947.7	3947.7	3947.7
2.5°	3945.4	3930.9	3896.5	3927.6	3918.1
5°	3801.1	3781.0	3754.2	3800.5	3803.3
7.5°	3482.7	3489.2	3464.3	3515.4	3510.0
10°	3224.9	3229.8	3227.0	3243.7	3224.9
12.5°	2926.1	2945.4	2908.9	2934.7	2942.6
15°	2455.1	2486.4	2416.0	2450.1	2449.4
17.5°	2013.5	2010.3	1973.9	1980.3	1978.2
20°	1723.8	1718.9	1688.2	1683.3	1686.8
22.5°	1475.6	1467.4	1456.6	1444.3	1448.9
25°	1178.8	1152.4	1131.9	1148.6	1134.0
27.5°	946.2	945.8	928.8	930.7	933.5
30°	838.1	833.2	816.7	817.2	808.9
32.5°	741.9	745.4	725.1	721.1	712.7
35°	616.8	616.8	601.2	590.4	588.3
37.5°	500.8	499.6	488.5	473.3	467.8
40°	426.9	423.4	416.2	397.5	389.9
42.5°	342.6	351.9	345.0	326.3	314.7
45°	201.3	240.3	246.9	224.1	162.2
47.5°	86.5	129.4	164.8	107.4	55.9
50°	39.8	73.2	123.8	52.8	29.2
52.5°	23.3	40.0	91.9	30.9	18.4
55°	10.0	15.5	44.8	12.7	7.8
57.5°	3.7	6.8	16.9	5.5	3.0
60°	1.4	2.8	7.8	2.1	0.7
62.5°	0.3	1.1	3.8	1.0	0.1
65°	0.0	0.0	0.7	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	1.5	1.3	1.3
90°	0.0	3.1	7.4	6.3	6.3
92.5°	15.2	54.7	174.9	57.7	44.4
95°	44.4	135.4	602.9	214.9	132.2
97.5°	83.6	176.2	1023.2	623.1	380.3
100°	108.9	199.9	1181.4	1053.5	683.2
102.5°	137.7	225.4	1161.9	1558.5	1185.0
105°	181.9	262.6	1060.8	2026.1	1918.6
107.5°	229.7	305.6	964.8	2066.7	2180.7
110°	264.4	333.7	919.1	2016.3	2222.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	361.6	890.3	1925.4	2190.8
115°	336.3	401.5	864.1	1780.8	2095.2
117.5°	380.8	439.5	853.9	1648.4	1961.3
120°	406.1	464.0	851.4	1566.9	1869.9
122.5°	430.7	487.8	852.3	1496.2	1778.5
125°	467.5	521.3	852.5	1406.0	1657.3
127.5°	499.0	554.0	852.3	1338.5	1548.0
130°	519.3	575.1	851.4	1299.9	1487.1
132.5°	537.1	595.4	850.6	1264.1	1439.7
135°	564.8	623.7	848.2	1213.5	1368.6
137.5°	591.9	651.2	845.9	1162.1	1299.8
140°	611.3	668.2	845.1	1127.2	1257.5
142.5°	629.9	684.3	845.1	1093.9	1210.2
145°	660.0	708.6	846.1	1045.1	1144.4
147.5°	689.2	731.4	847.6	1003.5	1080.3
150°	708.6	745.9	849.3	978.7	1043.9
152.5°	728.1	758.7	850.1	959.8	1011.7
155°	753.0	777.9	851.4	935.8	970.9
157.5°	776.7	794.5	852.7	918.0	942.6
160°	791.1	805.6	853.5	906.8	926.5
162.5°	803.8	815.0	853.5	897.4	912.1
165°	821.8	829.0	853.5	885.5	895.8
167.5°	834.5	839.0	853.7	876.5	881.9
170°	842.9	845.0	854.6	870.5	872.6
172.5°	848.9	850.1	856.3	867.0	866.6
175°	856.7	856.7	856.7	863.0	860.9
177.5°	859.9	859.0	858.2	862.3	859.0
180°	859.9	859.9	859.9	859.9	859.9

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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