

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: P853636

Luminaire Tested: SQ2-BBN-125U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853636
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-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

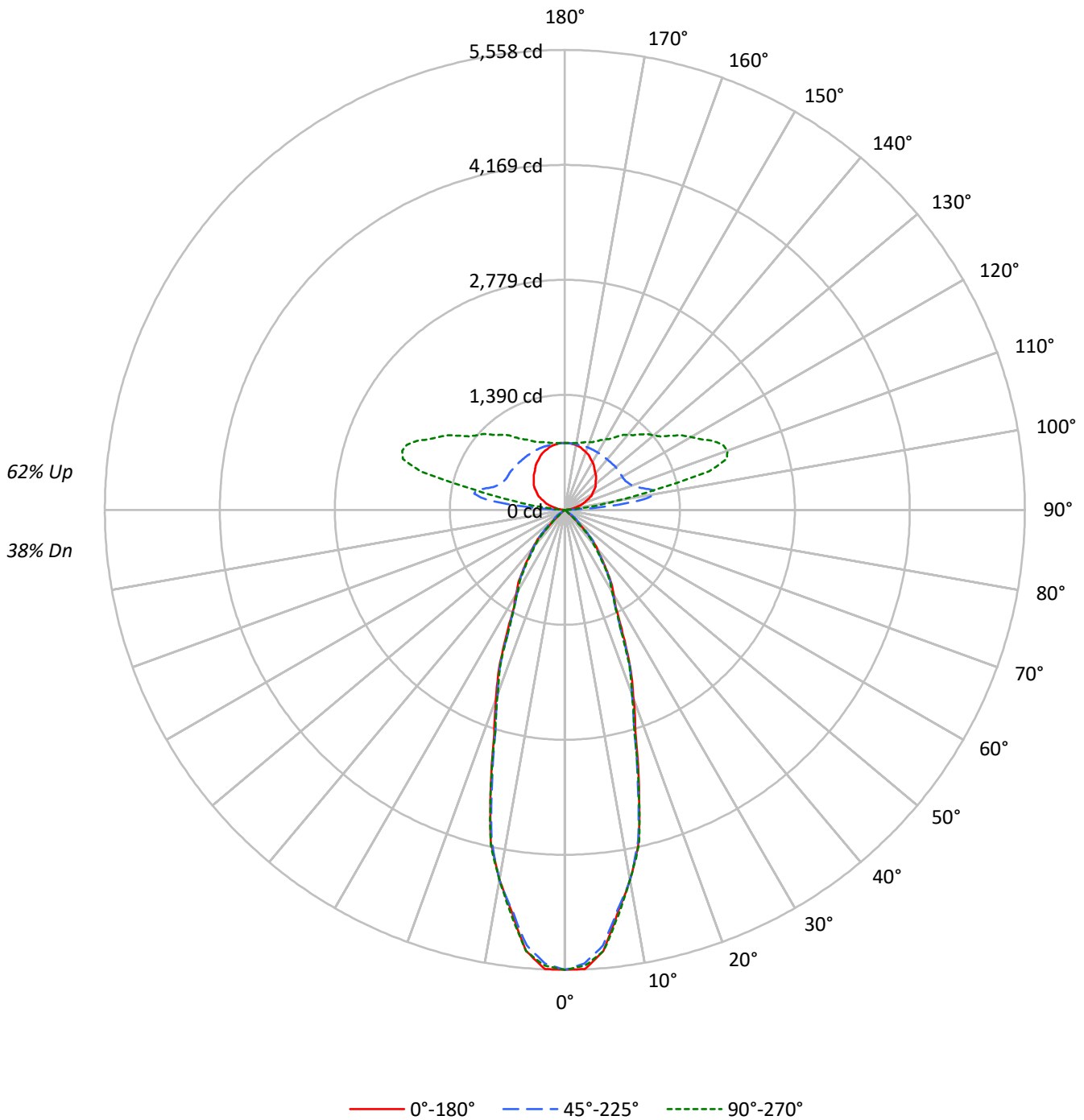
Lumens per Lamp: N/A
Luminaire Lumens: 7997.7 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.5
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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38
1	97	93	90	87	88	85	82	80	70	68	66	55	54	53	42	42	41	35
2	90	84	79	75	82	77	73	69	64	61	58	51	50	48	40	39	38	33
3	84	76	70	65	76	70	65	61	58	55	52	48	45	43	38	36	35	31
4	78	69	63	58	71	64	58	54	54	50	47	44	42	40	35	34	33	29
5	73	63	56	51	66	58	53	48	49	45	42	41	38	36	33	32	31	27
6	68	58	51	46	62	54	48	44	46	42	38	38	36	33	32	30	29	26
7	64	53	47	42	58	50	44	40	43	38	35	36	33	31	30	28	27	24
8	60	49	43	38	55	46	40	36	40	36	33	34	31	29	28	27	25	23
9	56	46	39	35	52	43	37	34	37	33	30	32	29	27	27	25	24	22
10	53	43	37	32	49	40	35	31	35	31	28	30	27	25	26	24	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	89734	89734	89734
5°	86733	85662	86782
10°	74435	74484	74435
15°	57775	56854	57641
20°	41697	40837	40802
25°	29566	28388	28442
30°	21996	21436	21231
35°	17117	16681	16326
40°	12665	12349	11569
45°	6471	7935	5215
50°	1409	4378	1032
55°	394	1776	310
60°	65	355	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: 7935 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.6	6.0
10°-20°	947.5	11.8
20°-30°	764.3	9.6
30°-40°	531.0	6.6
40°-50°	245.3	3.1
50°-60°	34.4	0.4
60°-70°	1.2	0.0
70°-80°	0.0	0.0
80°-90°	1.2	0.0
90°-100°	309.5	3.9
100°-110°	1007.8	12.6
110°-120°	996.9	12.5
120°-130°	814.6	10.2
130°-140°	665.8	8.3
140°-150°	518.6	6.5
150°-160°	373.8	4.7
160°-170°	228.5	2.9
170°-180°	77.1	1.0
0°-30°	2192.4	27.4
0°-40°	2723.3	34.1
0°-60°	3003.1	37.5
0°-90°	3005.4	37.6
90°-120°	2314.2	28.9
90°-150°	4313.2	53.9
90°-180°	4993.0	62.4
0°-180°	7997.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5558	5558	5558	5558	5558	
5°	5351	5323	5285	5350	5354	481
15°	3456	3500	3401	3449	3448	951
25°	1660	1622	1594	1617	1596	777
35°	868	868	846	831	828	543
45°	283	338	348	316	228	229
55°	14	22	63	18	11	18
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°	42	127	567	202	124	49
105°	171	247	998	1907	1806	183
115°	316	378	813	1676	1972	313
125°	440	490	802	1323	1560	392
135°	532	587	798	1142	1288	411
145°	621	667	796	984	1077	389
155°	709	732	801	881	914	326
165°	773	780	803	833	843	218
175°	806	806	806	812	810	76
180°	809	809	809	809	809	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5557.7	5557.7	5557.7	5557.7	5557.7
2.5°	5554.5	5534.1	5485.6	5529.4	5516.0
5°	5351.4	5323.0	5285.3	5350.5	5354.4
7.5°	4903.1	4912.3	4877.2	4949.2	4941.5
10°	4540.1	4547.0	4543.1	4566.6	4540.1
12.5°	4119.5	4146.7	4095.2	4131.5	4142.7
15°	3456.4	3500.5	3401.3	3449.4	3448.4
17.5°	2834.6	2830.1	2779.0	2787.9	2785.0
20°	2426.8	2419.9	2376.7	2369.8	2374.7
22.5°	2077.5	2065.9	2050.6	2033.3	2039.8
25°	1659.6	1622.4	1593.5	1617.1	1596.5
27.5°	1332.1	1331.5	1307.6	1310.3	1314.3
30°	1179.8	1173.0	1149.8	1150.5	1138.8
32.5°	1044.4	1049.3	1020.8	1015.1	1003.4
35°	868.4	868.4	846.3	831.2	828.3
37.5°	705.1	703.3	687.7	666.3	658.6
40°	600.9	596.0	585.9	559.6	548.9
42.5°	482.4	495.5	485.8	459.4	443.1
45°	283.4	338.3	347.5	315.5	228.4
47.5°	121.8	182.1	232.0	151.2	78.7
50°	56.1	103.1	174.3	74.4	41.1
52.5°	32.9	56.4	129.4	43.5	25.8
55°	14.0	21.9	63.1	17.9	11.0
57.5°	5.2	9.5	23.8	7.7	4.2
60°	2.0	4.0	11.0	3.0	1.0
62.5°	0.4	1.6	5.4	1.4	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	1.4	1.2	1.2
90°	0.0	2.9	7.0	6.0	6.0
92.5°	14.3	51.5	164.6	54.3	41.8
95°	41.8	127.4	567.3	202.3	124.4
97.5°	78.6	165.8	962.9	586.4	357.9
100°	102.5	188.2	1111.8	991.4	643.0
102.5°	129.6	212.1	1093.5	1466.7	1115.2
105°	171.2	247.1	998.3	1906.7	1805.5
107.5°	216.2	287.6	907.9	1944.9	2052.2
110°	248.8	314.0	864.9	1897.5	2091.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	275.9	340.3	837.9	1812.0	2061.7
115°	316.5	377.8	813.2	1675.9	1971.7
117.5°	358.3	413.6	803.6	1551.2	1845.7
120°	382.2	436.7	801.2	1474.6	1759.7
122.5°	405.3	459.0	802.0	1408.1	1673.7
125°	439.9	490.5	802.2	1323.2	1559.7
127.5°	469.6	521.4	802.0	1259.6	1456.8
130°	488.7	541.3	801.2	1223.3	1399.4
132.5°	505.4	560.3	800.4	1189.6	1354.8
135°	531.5	587.0	798.3	1142.0	1288.0
137.5°	557.0	612.8	796.1	1093.6	1223.3
140°	575.3	628.8	795.3	1060.8	1183.4
142.5°	592.8	644.0	795.3	1029.5	1138.9
145°	621.1	666.8	796.3	983.5	1076.9
147.5°	648.6	688.3	797.7	944.4	1016.6
150°	666.9	701.9	799.2	921.1	982.4
152.5°	685.2	714.0	800.0	903.3	952.1
155°	708.7	732.0	801.2	880.6	913.7
157.5°	731.0	747.7	802.4	863.9	887.0
160°	744.5	758.1	803.2	853.4	871.9
162.5°	756.4	767.0	803.2	844.6	858.4
165°	773.4	780.2	803.2	833.3	843.0
167.5°	785.3	789.6	803.4	824.8	829.9
170°	793.3	795.2	804.2	819.2	821.1
172.5°	798.9	800.0	805.8	816.0	815.6
175°	806.2	806.2	806.2	812.1	810.2
177.5°	809.2	808.4	807.6	811.5	808.4
180°	809.2	809.2	809.2	809.2	809.2



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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