

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: P853596

Luminaire Tested: SQ2-BBN-075U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853596
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-075U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

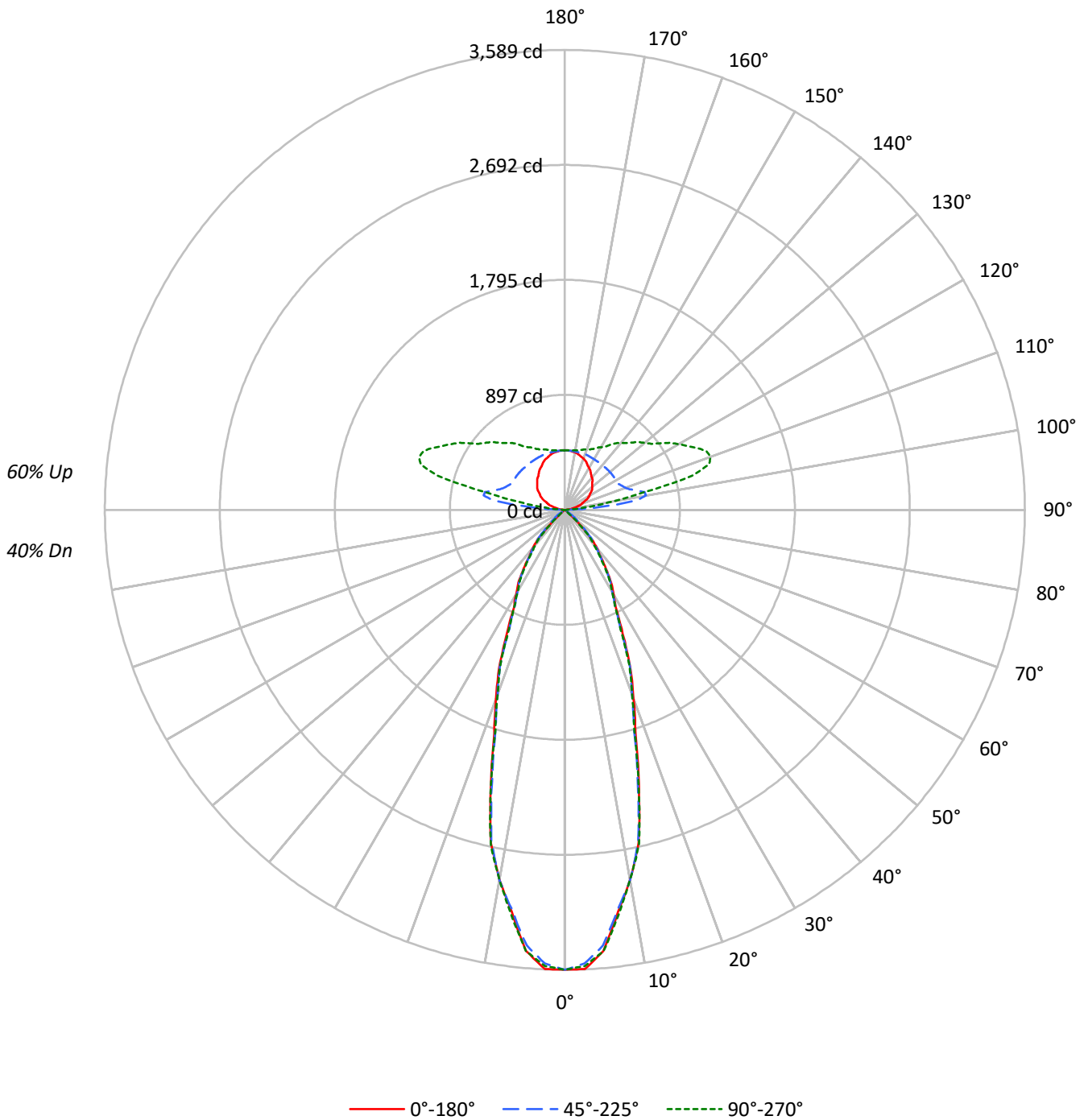
Lumens per Lamp: N/A
Luminaire Lumens: 4816.5 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 41.4
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	98	94	91	88	89	86	84	81	71	69	68	57	56	55	45	44	44	38
2	91	85	80	76	83	78	74	70	65	62	60	53	51	50	42	41	40	35
3	84	77	71	66	77	71	66	62	60	56	53	49	47	45	40	39	37	33
4	79	70	64	59	72	65	59	55	55	51	48	46	43	41	38	36	35	31
5	74	64	57	52	68	59	54	49	51	47	44	43	40	38	36	34	32	29
6	69	59	52	47	63	55	49	45	47	43	40	40	37	35	34	32	30	28
7	65	54	48	43	59	51	45	41	44	40	37	38	35	33	32	30	28	26
8	61	50	44	39	56	47	41	38	41	37	34	36	32	30	30	28	27	25
9	57	47	41	36	53	44	38	35	39	34	31	34	31	28	29	27	25	23
10	54	44	38	34	50	41	36	32	36	32	29	32	29	27	27	25	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	57951	57951	57951
5°	56012	55319	56044
10°	48070	48101	48070
15°	37310	36717	37225
20°	26928	26373	26350
25°	19094	18333	18367
30°	14205	13843	13711
35°	11054	10774	10543
40°	8180	7975	7472
45°	4179	5124	3368
50°	909	2826	666
55°	256	1146	200
60°	42	229	19
65°	0	23	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: 5124 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.4	6.4
10°-20°	611.9	12.7
20°-30°	493.6	10.2
30°-40°	342.9	7.1
40°-50°	158.4	3.3
50°-60°	22.2	0.5
60°-70°	0.8	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	175.7	3.6
100°-110°	582.3	12.1
110°-120°	578.0	12.0
120°-130°	470.8	9.8
130°-140°	382.6	7.9
140°-150°	297.1	6.2
150°-160°	214.1	4.4
160°-170°	131.1	2.7
170°-180°	44.3	0.9
0°-30°	1415.8	29.4
0°-40°	1758.7	36.5
0°-60°	1939.4	40.3
0°-90°	1940.7	40.3
90°-120°	1336.0	27.7
90°-150°	2486.4	51.6
90°-180°	2876.0	59.7
0°-180°	4816.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3589	3589	3589	3589	3589	
5°	3456	3438	3413	3455	3458	311
15°	2232	2261	2197	2228	2227	614
25°	1072	1048	1029	1044	1031	502
35°	561	561	547	537	535	351
45°	183	218	224	204	148	148
55°	9	14	41	12	7	11
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	1	3	4	4	1
95°	25	74	318	114	76	29
105°	102	145	583	1100	1028	107
115°	182	218	469	977	1142	180
125°	254	282	461	768	905	226
135°	304	335	457	659	743	235
145°	353	379	456	567	620	221
155°	403	417	459	506	525	186
165°	442	447	461	479	484	125
175°	463	463	464	466	466	44
180°	464	464	464	464	464	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3589.2	3589.2	3589.2	3589.2	3589.2
2.5°	3587.1	3573.9	3542.6	3570.9	3562.3
5°	3455.9	3437.6	3413.2	3455.3	3457.9
7.5°	3166.4	3172.3	3149.7	3196.2	3191.2
10°	2932.0	2936.4	2933.9	2949.1	2932.0
12.5°	2660.3	2677.9	2644.7	2668.1	2675.3
15°	2232.1	2260.6	2196.6	2227.6	2227.0
17.5°	1830.6	1827.7	1794.6	1800.4	1798.5
20°	1567.2	1562.8	1534.9	1530.4	1533.6
22.5°	1341.6	1334.2	1324.3	1313.1	1317.3
25°	1071.8	1047.7	1029.1	1044.3	1031.0
27.5°	860.3	859.9	844.5	846.2	848.7
30°	761.9	757.5	742.5	743.0	735.4
32.5°	674.5	677.7	659.2	655.6	648.0
35°	560.8	560.8	546.6	536.8	534.9
37.5°	455.4	454.2	444.1	430.3	425.3
40°	388.1	384.9	378.4	361.4	354.5
42.5°	311.5	320.0	313.7	296.6	286.1
45°	183.0	218.5	224.4	203.8	147.5
47.5°	78.7	117.6	149.8	97.6	50.8
50°	36.2	66.6	112.5	48.0	26.5
52.5°	21.2	36.4	83.6	28.1	16.7
55°	9.1	14.1	40.7	11.5	7.1
57.5°	3.4	6.1	15.4	5.0	2.7
60°	1.3	2.6	7.1	1.9	0.6
62.5°	0.3	1.0	3.5	0.9	0.1
65°	0.0	0.0	0.6	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	0.2	0.6	0.8	0.8
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.7	29.7	87.5	28.4	23.8
95°	25.0	73.9	318.3	113.6	76.0
97.5°	46.0	97.1	555.7	324.1	204.8
100°	60.6	109.5	643.4	552.6	366.4
102.5°	76.7	124.1	638.0	844.5	638.0
105°	101.9	145.2	582.8	1099.5	1028.0
107.5°	127.7	166.3	529.9	1125.4	1179.8
110°	142.3	180.9	503.0	1099.8	1209.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	157.7	195.5	486.8	1054.3	1194.4
115°	181.8	217.5	469.3	977.0	1142.5
117.5°	205.6	237.4	463.0	903.1	1076.7
120°	220.2	251.3	460.6	856.8	1025.1
122.5°	233.3	263.6	460.6	818.8	974.4
125°	253.9	282.1	460.6	767.7	904.9
127.5°	270.8	298.5	459.5	728.9	846.3
130°	280.8	310.0	458.7	706.3	811.7
132.5°	290.0	319.9	458.0	687.6	782.4
135°	303.9	334.9	456.8	658.7	743.4
137.5°	318.9	348.8	455.6	630.8	705.5
140°	328.9	358.0	454.9	612.2	680.9
142.5°	338.1	366.5	455.6	593.6	654.7
145°	352.9	379.3	455.8	566.7	620.3
147.5°	368.9	390.9	456.0	543.9	583.7
150°	378.9	398.6	456.8	530.7	564.5
152.5°	388.1	407.1	457.6	519.7	546.8
155°	402.9	417.0	458.7	506.3	525.1
157.5°	417.4	428.3	459.9	496.7	510.1
160°	425.1	434.5	460.6	489.7	500.1
162.5°	432.8	439.9	460.6	485.1	493.1
165°	442.4	447.1	460.6	479.0	483.7
167.5°	451.2	453.7	461.6	473.6	476.0
170°	455.8	456.8	461.6	471.2	472.2
172.5°	458.9	459.9	462.4	468.9	469.1
175°	462.6	462.6	463.5	466.4	465.5
177.5°	464.5	464.5	463.7	465.2	463.7
180°	464.5	464.5	464.5	464.5	464.5



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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