

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: P853605

Luminaire Tested: SQ2-BBN-075U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853605
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-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

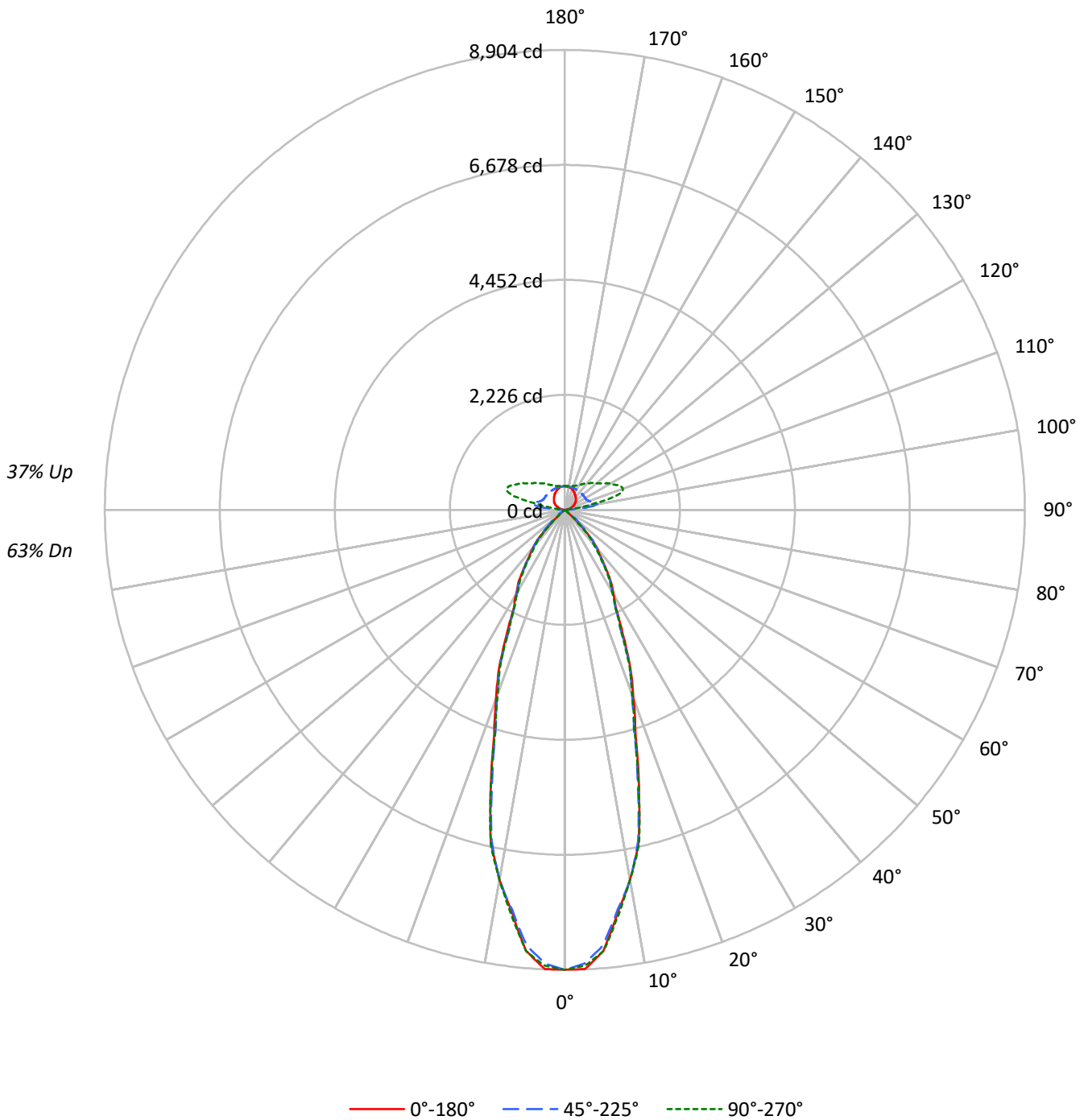
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7653.3 lumens
Efficiency: N/A
Efficacy: 104.7 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-Direct

Input Watts (W): 73.1
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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63				
1	104	101	98	95	97	95	92	90	84	82	81	74	73	72	65	64	63	59				
2	97	92	88	84	92	87	83	80	78	75	73	69	67	66	62	60	59	55				
3	92	85	79	75	86	80	76	72	72	69	66	65	63	60	58	57	55	52				
4	86	78	72	68	81	74	69	65	68	64	60	61	58	56	55	53	51	49				
5	81	72	66	61	77	69	64	60	63	59	56	58	54	52	52	50	48	46				
6	77	67	61	56	73	64	59	55	59	55	52	54	51	48	50	47	45	43				
7	72	63	56	52	69	60	55	51	56	51	48	51	48	45	47	45	43	41				
8	69	59	53	48	65	57	51	47	52	48	45	49	45	42	45	42	40	38				
9	65	55	49	45	62	53	48	44	50	45	42	46	43	40	43	40	38	36				
10	62	52	46	42	59	50	45	41	47	43	40	44	40	38	41	38	36	34				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	143756	143756	143756
5°	138947	137231	139025
10°	119247	119325	119247
15°	92558	91082	92343
20°	66800	65422	65367
25°	47365	45478	45564
30°	35238	34342	34013
35°	27419	26723	26156
40°	20291	19785	18533
45°	10369	12714	8353
50°	2258	7013	1653
55°	633	2846	495
60°	103	568	52
65°	0	61	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: 12714 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	769.9	10.1
10°-20°	1517.9	19.8
20°-30°	1224.4	16.0
30°-40°	850.6	11.1
40°-50°	393.0	5.1
50°-60°	55.2	0.7
60°-70°	1.9	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	173.5	2.3
100°-110°	575.1	7.5
110°-120°	570.7	7.5
120°-130°	464.9	6.1
130°-140°	377.8	4.9
140°-150°	293.4	3.8
150°-160°	211.4	2.8
160°-170°	129.5	1.7
170°-180°	43.7	0.6
0°-30°	3512.2	45.9
0°-40°	4362.8	57.0
0°-60°	4810.9	62.9
0°-90°	4813.4	62.9
90°-120°	1319.3	17.2
90°-150°	2455.4	32.1
90°-180°	2840.0	37.1
0°-180°	7653.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8904	8904	8904	8904	8904	
5°	8573	8528	8467	8572	8578	770
15°	5537	5608	5449	5526	5524	1524
25°	2659	2599	2553	2591	2558	1245
35°	1391	1391	1356	1332	1327	871
45°	454	542	557	506	366	367
55°	22	35	101	29	18	28
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	1	3	4	4	1
95°	25	73	314	112	75	28
105°	101	143	576	1086	1015	106
115°	180	215	463	965	1128	177
125°	251	279	455	758	894	223
135°	300	331	451	650	734	232
145°	348	374	450	560	612	219
155°	398	412	453	500	518	183
165°	437	442	455	473	478	123
175°	457	457	458	461	460	43
180°	459	459	459	459	459	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8903.6	8903.6	8903.6	8903.6	8903.6
2.5°	8898.4	8865.8	8788.0	8858.2	8836.8
5°	8573.0	8527.5	8467.1	8571.6	8577.8
7.5°	7854.8	7869.6	7813.4	7928.7	7916.5
10°	7273.4	7284.3	7278.2	7315.7	7273.4
12.5°	6599.5	6643.1	6560.6	6618.8	6636.7
15°	5537.3	5607.9	5449.0	5526.0	5524.4
17.5°	4541.2	4533.9	4451.9	4466.3	4461.6
20°	3887.8	3876.8	3807.6	3796.5	3804.4
22.5°	3328.1	3309.6	3285.1	3257.4	3267.8
25°	2658.7	2599.1	2552.8	2590.6	2557.6
27.5°	2134.0	2133.1	2094.9	2099.2	2105.5
30°	1890.1	1879.2	1842.0	1843.2	1824.4
32.5°	1673.2	1681.1	1635.3	1626.2	1607.4
35°	1391.1	1391.1	1355.8	1331.7	1327.0
37.5°	1129.6	1126.8	1101.7	1067.4	1055.1
40°	962.7	954.9	938.7	896.5	879.3
42.5°	772.7	793.8	778.2	735.9	709.8
45°	454.1	541.9	556.8	505.5	365.8
47.5°	195.1	291.8	371.6	242.2	126.1
50°	89.9	165.2	279.2	119.1	65.8
52.5°	52.6	90.3	207.3	69.6	41.4
55°	22.5	35.0	101.1	28.6	17.6
57.5°	8.3	15.2	38.2	12.4	6.7
60°	3.2	6.3	17.6	4.7	1.6
62.5°	0.6	2.5	8.7	2.2	0.3
65°	0.0	0.0	1.6	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	2.8	3.8	3.8
92.5°	7.6	29.3	86.4	28.0	23.6
95°	24.7	73.0	314.3	112.2	75.0
97.5°	45.4	95.9	548.7	320.0	202.3
100°	59.8	108.1	635.3	545.7	361.8
102.5°	75.8	122.6	630.0	833.9	630.0
105°	100.7	143.4	575.5	1085.8	1015.2
107.5°	126.1	164.2	523.3	1111.4	1165.1
110°	140.6	178.6	496.7	1086.1	1194.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	155.7	193.1	480.7	1041.1	1179.5
115°	179.5	214.8	463.4	964.8	1128.2
117.5°	203.0	234.4	457.2	891.8	1063.3
120°	217.5	248.1	454.9	846.1	1012.4
122.5°	230.4	260.3	454.9	808.6	962.2
125°	250.7	278.6	454.9	758.1	893.6
127.5°	267.4	294.7	453.8	719.8	835.7
130°	277.3	306.1	453.0	697.5	801.5
132.5°	286.4	316.0	452.2	679.1	772.7
135°	300.1	330.7	451.1	650.5	734.1
137.5°	314.9	344.4	450.0	623.0	696.7
140°	324.8	353.6	449.2	604.6	672.4
142.5°	333.9	362.0	450.0	586.2	646.5
145°	348.5	374.5	450.1	559.6	612.5
147.5°	364.3	386.0	450.3	537.1	576.5
150°	374.2	393.7	451.1	524.0	557.5
152.5°	383.3	402.0	451.9	513.2	540.0
155°	397.9	411.8	453.0	500.0	518.5
157.5°	412.2	422.9	454.1	490.5	503.7
160°	419.8	429.0	454.9	483.6	493.8
162.5°	427.4	434.4	454.9	479.0	487.0
165°	436.9	441.5	454.9	473.0	477.7
167.5°	445.6	448.0	455.8	467.7	470.1
170°	450.1	451.1	455.8	465.4	466.3
172.5°	453.2	454.1	456.6	463.1	463.3
175°	456.8	456.8	457.7	460.6	459.6
177.5°	458.7	458.7	457.9	459.4	457.9
180°	458.7	458.7	458.7	458.7	458.7



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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