

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: P854025

Luminaire Tested: SQ2-PH1-075U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854025
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PH1-075U-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

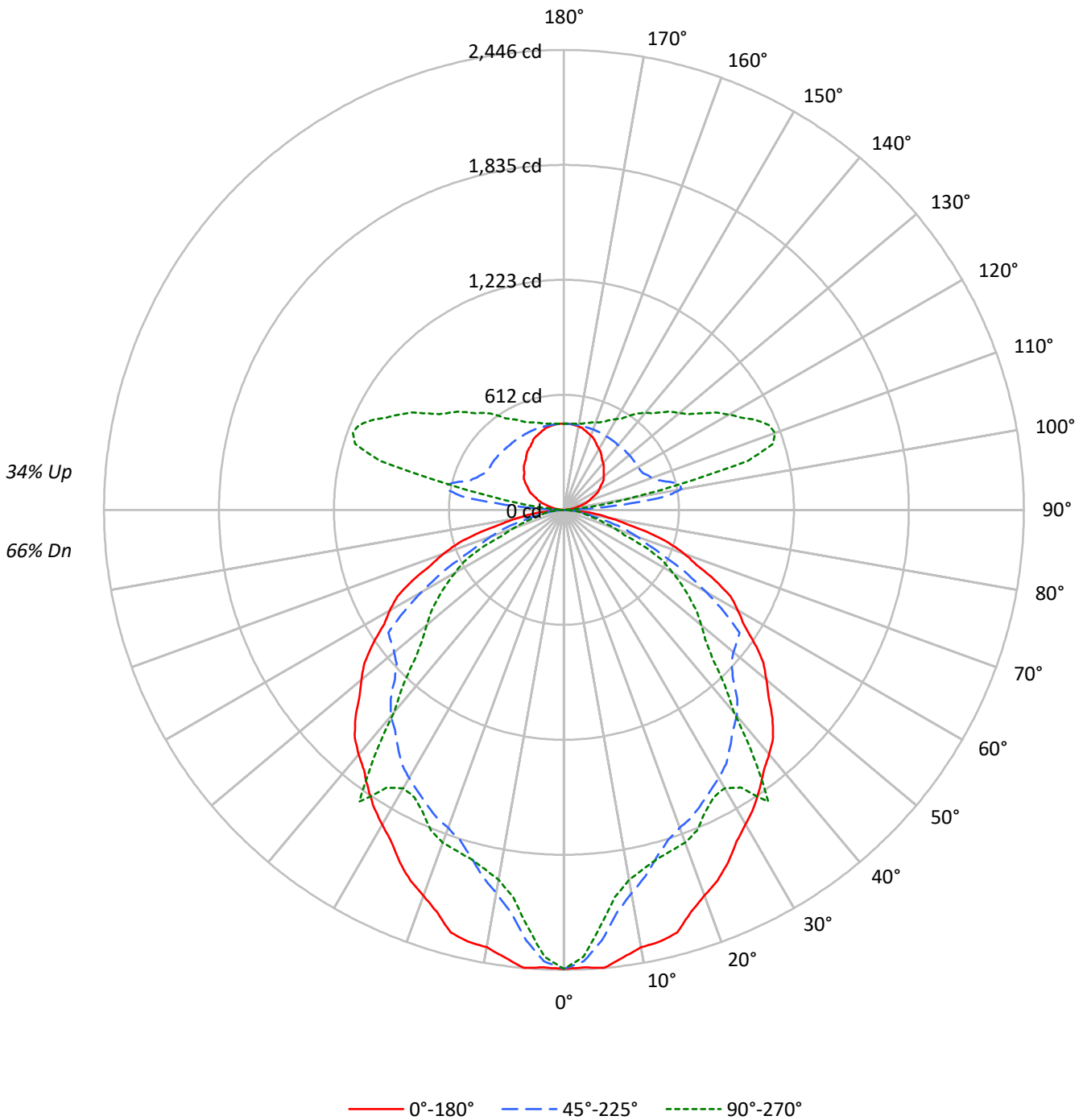
Lumens per Lamp: N/A
Luminaire Lumens: 8240.3 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.02 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 72.5
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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	93	90	95	92	88	85	81	79	76	72	70	68	63	61	60	56				
2	93	85	79	74	87	80	75	70	71	67	64	63	60	57	55	53	51	47				
3	85	75	68	62	79	71	64	59	63	58	54	56	52	48	49	46	44	40				
4	78	67	59	52	73	63	56	50	56	50	46	50	45	42	44	41	38	34				
5	71	59	51	45	67	56	49	43	50	44	40	45	40	36	40	36	33	30				
6	66	53	45	39	62	51	43	38	46	39	35	41	36	32	36	32	29	26				
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	33	29	26	23				
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	30	26	23	21				
9	53	40	33	27	50	38	31	27	35	29	25	31	26	23	28	24	21	19				
10	49	37	30	25	46	35	29	24	32	26	22	29	24	21	26	22	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39417	39417	39417
5°	39642	37271	36028
10°	38730	33931	32750
15°	38903	31915	32110
20°	37515	30931	32368
25°	36829	30788	31614
30°	36031	30704	31873
35°	35757	30354	37359
40°	35789	30157	29619
45°	35801	29012	25512
50°	35299	29582	23920
55°	34849	32104	22950
60°	34504	28126	21526
65°	33899	22808	18724
70°	32021	19407	13379
75°	28546	14635	10143
80°	23329	9503	9503
85°	14635	8614	6447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 35801 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.8	2.6
10°-20°	565.0	6.9
20°-30°	828.5	10.1
30°-40°	1003.3	12.2
40°-50°	986.7	12.0
50°-60°	858.9	10.4
60°-70°	597.1	7.2
70°-80°	283.1	3.4
80°-90°	62.8	0.8
90°-100°	173.5	2.1
100°-110°	575.1	7.0
110°-120°	570.7	6.9
120°-130°	464.9	5.6
130°-140°	377.8	4.6
140°-150°	293.4	3.6
150°-160°	211.4	2.6
160°-170°	129.5	1.6
170°-180°	43.7	0.5
0°-30°	1608.3	19.5
0°-40°	2611.7	31.7
0°-60°	4457.2	54.1
0°-90°	5400.3	65.5
90°-120°	1319.3	16.0
90°-150°	2455.4	29.8
90°-180°	2840.0	34.5
0°-180°	8240.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2441	2441	2441	2441	2441	
5°	2446	2444	2300	2228	2223	230
15°	2327	2073	1909	1896	1921	649
25°	2067	1758	1728	1781	1775	951
35°	1814	1467	1540	1673	1895	1136
45°	1568	1161	1271	1315	1117	1205
55°	1238	904	1140	822	815	1106
65°	887	622	597	490	490	872
75°	458	317	235	167	163	485
85°	79	52	46	37	35	106
90°	0	1	3	4	4	3
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°	2441.3	2441.3	2441.3	2441.3	2441.3
2.5°	2435.7	2461.1	2404.1	2381.7	2378.1
5°	2445.9	2443.6	2299.6	2227.5	2222.9
7.5°	2401.3	2330.9	2158.8	2079.3	2075.6
10°	2362.3	2255.5	2069.6	1997.6	1997.6
12.5°	2353.0	2184.5	1997.1	1944.0	1954.9
15°	2327.4	2073.1	1909.3	1896.0	1921.0
17.5°	2242.9	1969.0	1841.0	1871.4	1900.5
20°	2183.4	1913.2	1800.2	1856.5	1883.8
22.5°	2133.3	1859.4	1770.4	1832.1	1846.6
25°	2067.3	1758.4	1728.2	1781.4	1774.6
27.5°	1988.3	1665.8	1685.9	1718.5	1722.6
30°	1932.6	1610.1	1646.9	1680.1	1709.6
32.5°	1878.7	1545.3	1604.1	1682.8	1750.5
35°	1814.1	1466.6	1540.0	1672.8	1895.4
37.5°	1746.3	1373.8	1475.4	1587.2	1658.0
40°	1698.0	1307.3	1430.8	1568.8	1405.3
42.5°	1645.9	1255.3	1363.9	1542.1	1265.9
45°	1567.9	1161.3	1270.6	1314.9	1117.3
47.5°	1475.9	1088.4	1207.4	1096.5	1019.2
50°	1405.3	1039.6	1177.7	1002.3	952.3
52.5°	1336.5	989.0	1157.2	924.6	891.0
55°	1238.0	904.2	1140.5	822.1	815.3
57.5°	1133.5	817.8	1008.6	732.9	744.7
60°	1068.5	761.9	871.0	680.3	666.6
62.5°	999.7	707.7	742.8	613.4	599.7
65°	887.3	621.6	597.0	490.1	490.1
67.5°	763.7	532.1	483.6	401.1	346.6
70°	678.3	473.9	411.1	319.7	283.4
72.5°	587.2	411.9	336.8	262.0	220.2
75°	457.6	316.8	234.6	167.1	162.6
77.5°	330.8	228.1	158.0	124.0	124.5
80°	250.9	173.6	102.2	99.9	102.2
82.5°	176.5	119.3	76.2	79.4	79.9
85°	79.0	51.7	46.5	37.1	34.8
87.5°	16.7	15.1	9.9	10.1	10.1
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	21.42	22.43	22.23	23.26	24.30	20.09	21.10	20.91	21.94	22.97
	3H	23.46	24.36	24.28	25.21	26.26	21.14	22.04	21.96	22.89	23.95
	4H	24.19	25.05	25.04	25.90	26.97	21.36	22.21	22.20	23.06	24.13
	6H	24.69	25.47	25.54	26.33	27.42	21.51	22.30	22.37	23.16	24.24
	8H	24.82	25.57	25.68	26.44	27.53	21.55	22.30	22.41	23.17	24.26
	12H	24.87	25.58	25.74	26.45	27.56	21.55	22.26	22.42	23.13	24.24
4H	2H	21.81	22.67	22.66	23.52	24.59	20.75	21.61	21.60	22.46	23.53
	3H	23.93	24.64	24.79	25.53	26.61	21.95	22.66	22.81	23.54	24.63
	4H	24.76	25.40	25.63	26.28	27.40	22.23	22.87	23.10	23.75	24.87
	6H	25.35	25.91	26.24	26.81	27.93	22.44	23.00	23.33	23.91	25.02
	8H	25.52	26.04	26.41	26.94	28.07	22.50	23.02	23.39	23.92	25.05
	12H	25.60	26.06	26.51	26.98	28.12	22.52	22.99	23.43	23.91	25.04
8H	4H	24.78	25.30	25.67	26.20	27.33	22.46	22.98	23.35	23.88	25.00
	6H	25.44	25.87	26.36	26.81	27.94	22.73	23.16	23.65	24.10	25.23
	8H	25.67	26.05	26.60	26.98	28.13	22.84	23.22	23.77	24.15	25.30
	12H	25.79	26.12	26.72	27.05	28.25	22.89	23.22	23.82	24.15	25.35
12H	4H	24.74	25.21	25.65	26.13	27.26	22.46	22.93	23.37	23.85	24.98
	6H	25.42	25.80	26.34	26.73	27.88	22.76	23.15	23.69	24.08	25.23
	8H	25.66	25.99	26.59	26.92	28.12	22.89	23.22	23.82	24.15	25.35