

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: P854307

Luminaire Tested: SQ2-PW1-125U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854307
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-125U-075D-930-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

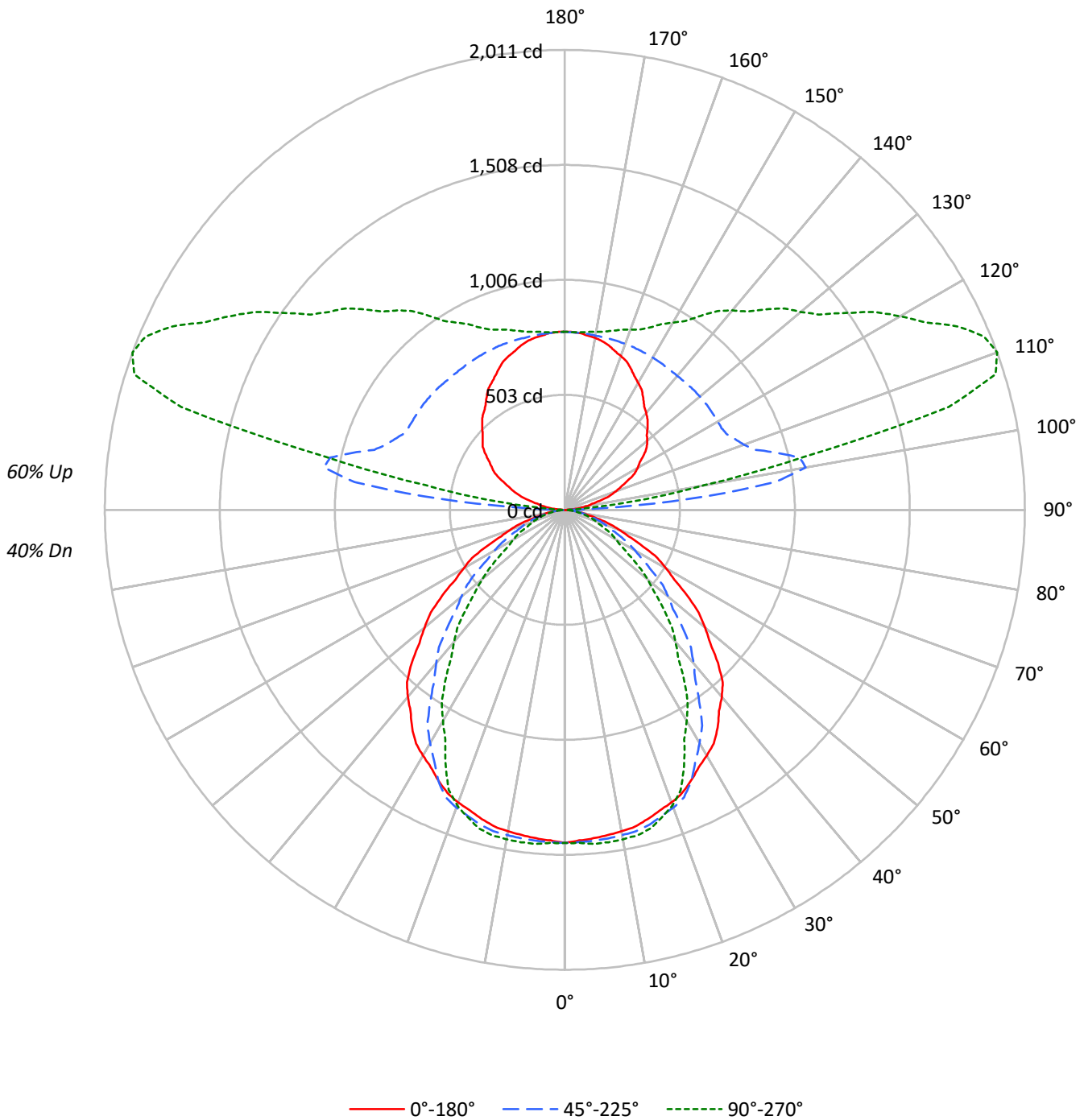
Lumens per Lamp: N/A
Luminaire Lumens: 8035.3 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.6
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	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	42	41	35
2	88	81	75	70	80	74	69	65	61	57	54	49	47	44	38	36	35	30
3	80	71	64	59	73	65	59	55	54	50	46	44	41	38	34	32	30	26
4	74	63	56	50	67	58	52	47	48	44	40	39	36	33	31	28	26	23
5	68	57	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23	20
6	62	51	43	38	57	47	40	35	39	34	30	32	28	25	25	23	21	18
7	58	46	38	33	53	42	36	31	36	30	27	29	25	23	23	21	19	16
8	54	42	34	29	49	39	32	27	33	27	24	27	23	20	21	19	17	14
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	27	23	19	23	19	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23521	23521	23521
5°	23365	23545	23770
10°	23407	23681	23976
15°	23402	23841	24120
20°	23411	23816	23649
25°	23284	23309	21975
30°	23126	21962	19867
35°	22945	20209	17940
40°	22489	18423	15850
45°	21607	16568	13844
50°	20110	14812	11848
55°	18396	13084	9607
60°	16488	11380	8289
65°	14418	9807	7370
70°	11788	8710	6680
75°	9177	7530	6145
80°	6834	6453	5421
85°	4631	4891	3075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21607 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	1.7
10°-20°	401.9	5.0
20°-30°	591.5	7.4
30°-40°	646.7	8.0
40°-50°	580.2	7.2
50°-60°	432.8	5.4
60°-70°	273.5	3.4
70°-80°	135.5	1.7
80°-90°	32.6	0.4
90°-100°	297.7	3.7
100°-110°	969.3	12.1
110°-120°	958.8	11.9
120°-130°	783.5	9.8
130°-140°	640.4	8.0
140°-150°	498.8	6.2
150°-160°	359.5	4.5
160°-170°	219.7	2.7
170°-180°	74.1	0.9
0°-30°	1132.2	14.1
0°-40°	1778.9	22.1
0°-60°	2791.8	34.7
0°-90°	3233.4	40.2
90°-120°	2225.8	27.7
90°-150°	4148.5	51.6
90°-180°	4802.0	59.8
0°-180°	8035.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1442	1465	1453	1454	1467	137
15°	1400	1427	1426	1436	1443	395
25°	1307	1336	1308	1254	1234	602
35°	1164	1152	1025	936	910	726
45°	946	870	726	635	606	726
55°	654	591	465	364	341	584
65°	377	346	257	206	193	374
75°	147	158	121	101	98	162
85°	25	32	26	18	17	32
90°	0	3	7	6	6	3
95°	40	123	546	194	120	47
105°	165	238	960	1834	1737	176
115°	304	363	782	1612	1896	301
125°	423	472	772	1273	1500	377
135°	511	565	768	1098	1239	395
145°	597	641	766	946	1036	374
155°	682	704	771	847	879	314
165°	744	750	772	802	811	209
175°	775	775	775	781	779	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1456.8	1456.8	1456.8	1456.8	1456.8
2.5°	1446.9	1465.3	1453.5	1454.7	1458.0
5°	1441.6	1464.6	1452.7	1454.4	1466.6
7.5°	1434.4	1457.7	1448.8	1453.8	1465.7
10°	1427.7	1452.1	1444.4	1451.5	1462.4
12.5°	1418.8	1444.3	1438.8	1447.1	1458.0
15°	1400.0	1427.1	1426.3	1436.2	1443.0
17.5°	1378.0	1405.2	1403.8	1406.4	1409.7
20°	1362.5	1389.6	1386.1	1376.4	1376.4
22.5°	1340.3	1369.6	1360.6	1334.0	1325.3
25°	1307.0	1335.5	1308.4	1253.8	1233.5
27.5°	1268.2	1291.2	1236.8	1159.3	1131.1
30°	1240.4	1258.0	1178.0	1092.7	1065.6
32.5°	1211.5	1218.3	1118.0	1029.4	1000.1
35°	1164.1	1151.9	1025.3	936.0	910.2
37.5°	1108.0	1071.7	936.3	842.7	814.2
40°	1067.0	1015.4	874.1	780.5	752.0
42.5°	1021.5	956.9	815.3	721.6	692.1
45°	946.3	870.3	725.6	634.8	606.3
47.5°	861.6	786.2	641.8	553.9	529.5
50°	800.6	727.3	589.7	501.6	471.7
52.5°	738.4	672.8	538.6	448.1	407.4
55°	653.5	591.1	464.8	364.4	341.3
57.5°	566.1	512.1	397.9	306.8	287.8
60°	510.6	463.1	352.4	275.7	256.7
62.5°	457.3	415.3	308.0	246.9	231.2
65°	377.4	346.2	256.7	206.4	192.9
67.5°	299.7	282.3	213.4	169.3	160.4
70°	249.7	244.3	184.5	148.3	141.5
72.5°	206.5	208.6	156.8	128.4	123.8
75°	147.1	157.9	120.7	101.2	98.5
77.5°	100.2	116.5	89.4	74.9	72.7
80°	73.5	89.8	69.4	58.3	58.3
82.5°	51.3	64.4	49.4	43.8	43.8
85°	25.0	31.8	26.4	18.0	16.6
87.5°	6.7	10.5	5.8	4.5	4.5
90°	0.0	2.8	6.7	5.7	5.7
92.5°	13.8	49.5	158.3	52.2	40.2
95°	40.2	122.6	545.7	194.5	119.7
97.5°	75.6	159.5	926.1	564.0	344.2
100°	98.6	181.0	1069.3	953.5	618.4
102.5°	124.6	204.0	1051.7	1410.7	1072.6
105°	164.7	237.7	960.2	1833.9	1736.6
107.5°	207.9	276.6	873.3	1870.6	1973.8
110°	239.3	302.0	831.9	1825.0	2011.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	265.4	327.3	805.9	1742.8	1983.0
115°	304.4	363.4	782.1	1611.9	1896.4
117.5°	344.6	397.8	772.9	1492.0	1775.2
120°	367.6	420.0	770.6	1418.3	1692.5
122.5°	389.8	441.5	771.4	1354.3	1609.8
125°	423.1	471.8	771.6	1272.6	1500.1
127.5°	451.7	501.5	771.4	1211.5	1401.1
130°	470.0	520.6	770.6	1176.5	1346.0
132.5°	486.1	538.9	769.9	1144.1	1303.1
135°	511.2	564.6	767.8	1098.3	1238.8
137.5°	535.7	589.4	765.7	1051.8	1176.5
140°	553.3	604.8	764.9	1020.3	1138.2
142.5°	570.2	619.4	764.9	990.1	1095.3
145°	597.4	641.4	765.8	945.9	1035.8
147.5°	623.8	662.0	767.2	908.3	977.8
150°	641.4	675.1	768.7	885.9	944.9
152.5°	659.0	686.7	769.5	868.8	915.8
155°	681.6	704.1	770.6	847.0	878.8
157.5°	703.0	719.1	771.8	830.9	853.1
160°	716.1	729.2	772.5	820.8	838.6
162.5°	727.6	737.7	772.5	812.3	825.6
165°	743.8	750.4	772.5	801.5	810.8
167.5°	755.3	759.4	772.7	793.3	798.2
170°	763.0	764.8	773.5	787.9	789.8
172.5°	768.3	769.5	775.0	784.8	784.4
175°	775.4	775.4	775.4	781.1	779.2
177.5°	778.3	777.5	776.8	780.5	777.5
180°	778.3	778.3	778.3	778.3	778.3

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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	17.04	17.79	18.08	18.84	20.24	13.53	14.28	14.57	15.32	16.73
	3H	18.35	19.03	19.41	20.08	21.50	14.72	15.39	15.78	16.45	17.87
	4H	18.72	19.36	19.79	20.41	21.85	15.17	15.80	16.23	16.86	18.29
	6H	18.92	19.50	20.00	20.56	22.01	15.48	16.06	16.55	17.12	18.57
	8H	18.95	19.51	20.03	20.58	22.02	15.55	16.10	16.63	17.18	18.62
	12H	18.94	19.47	20.03	20.54	22.00	15.56	16.08	16.64	17.15	18.62
4H	2H	17.13	17.77	18.20	18.82	20.25	14.20	14.83	15.27	15.89	17.32
	3H	18.67	19.19	19.74	20.28	21.72	15.57	16.10	16.65	17.18	18.63
	4H	19.17	19.65	20.25	20.73	22.19	16.12	16.60	17.20	17.67	19.14
	6H	19.50	19.91	20.59	21.01	22.47	16.51	16.93	17.61	18.02	19.49
	8H	19.57	19.96	20.66	21.05	22.52	16.62	17.00	17.71	18.09	19.57
	12H	19.58	19.93	20.69	21.03	22.52	16.63	16.98	17.74	18.09	19.57
8H	4H	19.20	19.59	20.29	20.68	22.15	16.43	16.82	17.53	17.91	19.39
	6H	19.63	19.95	20.75	21.08	22.56	16.94	17.26	18.05	18.39	19.86
	8H	19.78	20.06	20.90	21.17	22.66	17.10	17.38	18.22	18.49	19.99
	12H	19.84	20.08	20.96	21.19	22.72	17.16	17.40	18.28	18.51	20.04
12H	4H	19.15	19.50	20.26	20.61	22.09	16.45	16.79	17.55	17.90	19.38
	6H	19.62	19.90	20.74	21.02	22.51	17.00	17.28	18.12	18.39	19.89
	8H	19.78	20.03	20.90	21.13	22.67	17.18	17.43	18.31	18.54	20.07