

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: P854141

Luminaire Tested: SQ2-PP3-125U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854141
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-125U-075D-940-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

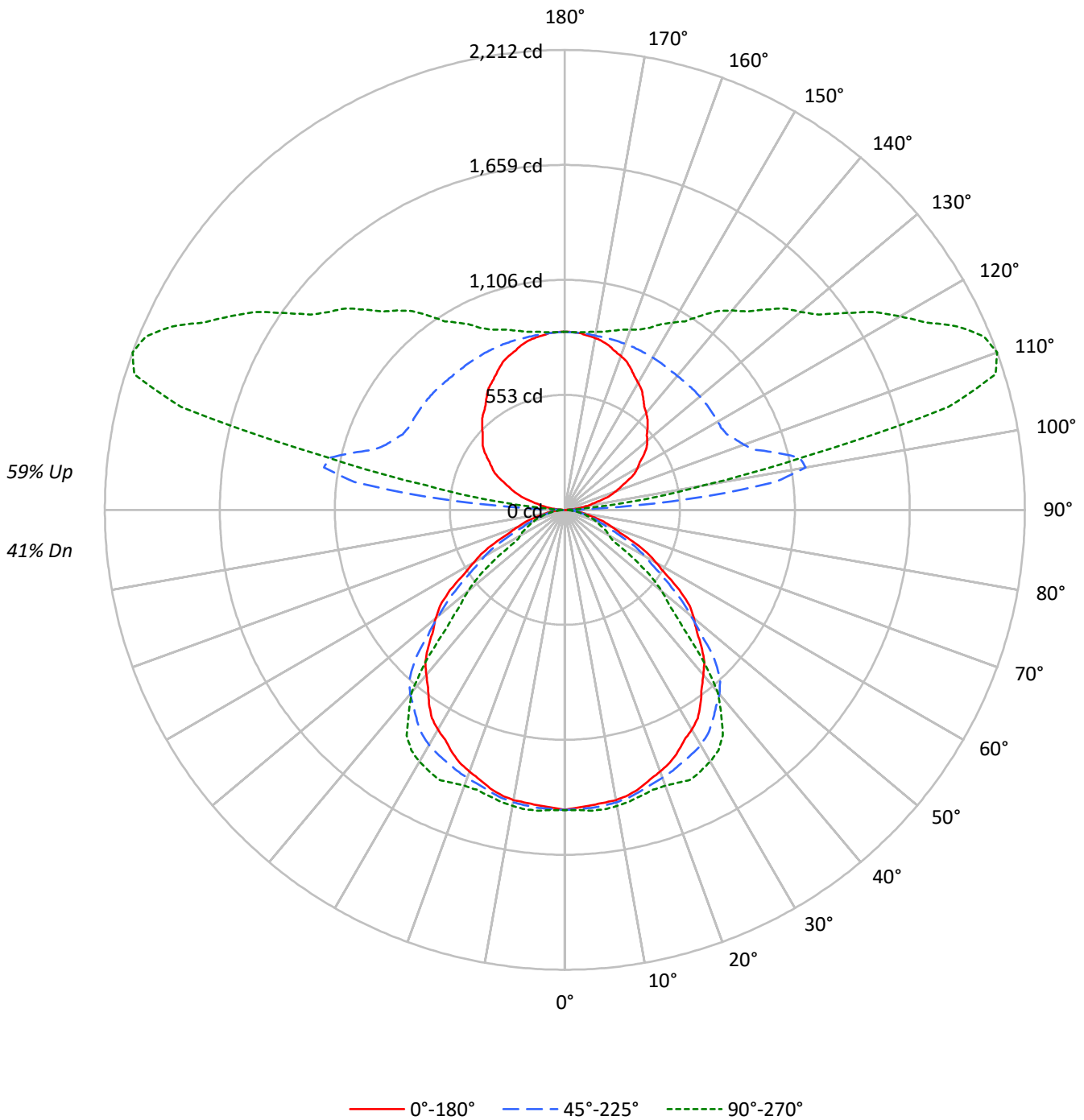
Lumens per Lamp: N/A
Luminaire Lumens: 8917.3 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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

TEST NUMBER: P854141

CATALOG NUMBER: SQ2-PP3-125U-075D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854141

CATALOG NUMBER: SQ2-PP3-125U-075D-940-UNV-STD-W-4

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	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	92	88	85	88	84	81	78	69	67	65	55	54	53	43	42	41	35
2	88	81	75	70	80	74	69	65	61	58	54	49	47	45	38	37	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	46	48	43	40	39	36	33	31	28	26	23
5	68	56	49	43	61	52	45	40	43	38	34	35	32	29	28	25	23	20
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	20	17
7	58	46	38	33	52	42	35	31	35	30	26	29	25	22	23	20	18	16
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	21	18	16	14
9	50	38	31	26	45	35	28	24	29	24	21	24	21	18	19	17	15	13
10	46	35	28	23	42	32	26	22	27	22	19	22	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23307	23307	23307
5°	23123	23321	23545
10°	23241	23417	23717
15°	23186	23415	23773
20°	23021	23570	24252
25°	22889	23868	25525
30°	22758	24352	26058
35°	22436	24421	26106
40°	21838	24378	24120
45°	21185	23274	18363
50°	20353	19854	15292
55°	18942	16709	10995
60°	16311	14338	7882
65°	13757	11075	7752
70°	11452	8714	7421
75°	9707	7517	6949
80°	8229	6527	6239
85°	6502	5372	3390

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 23274 cd/sqm



TEST NUMBER: P854141

CATALOG NUMBER: SQ2-PP3-125U-075D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.4	1.5
10°-20°	397.8	4.5
20°-30°	623.2	7.0
30°-40°	768.8	8.6
40°-50°	723.8	8.1
50°-60°	512.5	5.7
60°-70°	292.0	3.3
70°-80°	144.5	1.6
80°-90°	36.3	0.4
90°-100°	327.4	3.7
100°-110°	1066.0	12.0
110°-120°	1054.5	11.8
120°-130°	861.7	9.7
130°-140°	704.3	7.9
140°-150°	548.6	6.2
150°-160°	395.4	4.4
160°-170°	241.7	2.7
170°-180°	81.5	0.9
0°-30°	1158.4	13.0
0°-40°	1927.2	21.6
0°-60°	3163.5	35.5
0°-90°	3636.3	40.8
90°-120°	2447.9	27.5
90°-150°	4562.4	51.2
90°-180°	5281.0	59.2
0°-180°	8917.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1427	1452	1439	1442	1453	136
15°	1387	1406	1401	1415	1422	391
25°	1285	1318	1340	1394	1433	592
35°	1138	1170	1239	1310	1324	710
45°	928	998	1019	864	804	714
55°	673	713	594	447	391	594
65°	360	380	290	204	203	362
75°	156	172	120	113	111	169
85°	35	32	29	23	18	41
90°	0	3	7	6	6	4
95°	44	135	600	214	132	51
105°	181	261	1056	2017	1910	193
115°	335	400	860	1773	2086	331
125°	465	519	849	1400	1650	414
135°	562	621	844	1208	1362	434
145°	657	705	842	1040	1139	411
155°	750	774	848	932	966	345
165°	818	825	850	881	892	230
175°	853	853	853	859	857	81
180°	856	856	856	856	856	



TEST NUMBER: P854141

CATALOG NUMBER: SQ2-PP3-125U-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1443.5	1443.5	1443.5	1443.5	1443.5
2.5°	1432.5	1452.8	1439.9	1442.3	1444.7
5°	1426.7	1452.1	1438.9	1442.2	1452.7
7.5°	1421.2	1447.2	1434.4	1439.8	1452.7
10°	1417.6	1440.0	1428.3	1436.1	1446.6
12.5°	1406.6	1427.8	1417.3	1427.5	1436.8
15°	1387.1	1406.5	1400.8	1414.7	1422.2
17.5°	1360.5	1384.1	1384.0	1403.7	1411.5
20°	1339.8	1368.1	1371.8	1396.5	1411.5
22.5°	1317.8	1350.9	1357.1	1394.4	1420.0
25°	1284.8	1317.6	1339.8	1394.0	1432.8
27.5°	1246.4	1278.9	1324.5	1385.3	1416.0
30°	1220.7	1252.1	1306.2	1369.4	1397.7
32.5°	1189.0	1221.5	1279.3	1347.4	1373.3
35°	1138.3	1169.7	1239.0	1309.6	1324.5
37.5°	1080.0	1115.6	1193.3	1232.7	1233.5
40°	1036.1	1082.3	1156.6	1163.8	1144.4
42.5°	993.4	1052.8	1105.4	1073.2	987.0
45°	927.8	997.9	1019.3	863.8	804.2
47.5°	857.9	927.1	893.0	724.5	683.3
50°	810.3	875.9	790.4	647.6	608.8
52.5°	756.5	815.0	698.9	573.9	514.8
55°	672.9	713.2	593.6	447.3	390.6
57.5°	572.2	600.6	507.5	335.8	272.2
60°	505.1	527.5	444.0	275.5	244.1
62.5°	444.0	464.0	378.1	239.3	228.3
65°	360.1	379.5	289.9	204.4	202.9
67.5°	286.6	307.8	222.5	178.5	176.7
70°	242.6	265.0	184.6	160.2	157.2
72.5°	206.0	227.2	156.6	140.6	138.9
75°	155.6	172.1	120.5	112.9	111.4
77.5°	112.9	123.4	89.7	85.7	84.2
80°	88.5	93.0	70.2	68.6	67.1
82.5°	66.5	65.0	53.1	51.5	48.8
85°	35.1	32.1	29.0	22.8	18.3
87.5°	11.0	11.6	6.4	4.9	4.9
90°	0.0	3.1	7.4	6.3	6.3
92.5°	15.2	54.5	174.1	57.4	44.2
95°	44.2	134.8	600.1	214.0	131.6
97.5°	83.2	175.4	1018.5	620.3	378.6
100°	108.4	199.0	1176.0	1048.7	680.1
102.5°	137.1	224.4	1156.6	1551.4	1179.6
105°	181.1	261.4	1056.0	2016.9	1909.8
107.5°	228.7	304.2	960.4	2057.3	2170.7
110°	263.2	332.2	914.9	2007.1	2212.0



TEST NUMBER: P854141

CATALOG NUMBER: SQ2-PP3-125U-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.8	360.0	886.3	1916.7	2180.8
115°	334.8	399.7	860.2	1772.7	2085.6
117.5°	379.0	437.5	850.1	1640.9	1952.4
120°	404.3	461.9	847.5	1559.8	1861.4
122.5°	428.7	485.5	848.4	1489.4	1770.4
125°	465.3	518.9	848.6	1399.6	1649.8
127.5°	496.7	551.5	848.4	1332.4	1540.9
130°	516.9	572.5	847.5	1293.9	1480.3
132.5°	534.6	592.7	846.7	1258.3	1433.1
135°	562.2	620.9	844.4	1207.9	1362.4
137.5°	589.2	648.3	842.0	1156.8	1293.9
140°	608.5	665.2	841.2	1122.1	1251.8
142.5°	627.1	681.2	841.2	1088.9	1204.6
145°	657.0	705.3	842.3	1040.3	1139.2
147.5°	686.0	728.0	843.7	999.0	1075.4
150°	705.4	742.5	845.4	974.3	1039.1
152.5°	724.8	755.2	846.3	955.5	1007.1
155°	749.6	774.3	847.5	931.5	966.5
157.5°	773.2	790.9	848.8	913.8	938.3
160°	787.5	801.9	849.6	902.7	922.3
162.5°	800.1	811.3	849.6	893.3	908.0
165°	818.0	825.3	849.6	881.4	891.7
167.5°	830.7	835.2	849.8	872.5	877.8
170°	839.1	841.2	850.7	866.5	868.6
172.5°	845.0	846.2	852.4	863.1	862.7
175°	852.8	852.8	852.8	859.1	857.0
177.5°	855.9	855.1	854.3	858.4	855.1
180°	855.9	855.9	855.9	855.9	855.9



TEST NUMBER: P854141

CATALOG NUMBER: SQ2-PP3-125U-075D-940-UNV-STD-W-4

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	17.56	18.32	18.60	19.36	20.76	13.95	14.71	14.99	15.75	17.15
	3H	18.64	19.32	19.69	20.37	21.79	15.05	15.73	16.10	16.78	18.20
	4H	18.98	19.62	20.04	20.68	22.10	15.51	16.15	16.57	17.20	18.63
	6H	19.19	19.78	20.26	20.84	22.28	15.85	16.44	16.92	17.49	18.93
	8H	19.24	19.80	20.31	20.87	22.30	15.93	16.49	17.01	17.56	19.00
	12H	19.25	19.78	20.33	20.85	22.30	15.94	16.47	17.02	17.54	19.00
4H	2H	17.65	18.29	18.72	19.35	20.77	14.65	15.30	15.72	16.35	17.77
	3H	18.95	19.48	20.03	20.56	22.00	15.89	16.43	16.97	17.51	18.95
	4H	19.42	19.91	20.50	20.98	22.44	16.45	16.93	17.53	18.00	19.46
	6H	19.75	20.17	20.84	21.26	22.72	16.88	17.30	17.97	18.39	19.85
	8H	19.85	20.24	20.93	21.32	22.79	17.00	17.39	18.09	18.47	19.94
	12H	19.88	20.23	20.98	21.33	22.80	17.02	17.38	18.13	18.47	19.95
8H	4H	19.43	19.82	20.52	20.91	22.38	16.71	17.10	17.80	18.19	19.66
	6H	19.86	20.18	20.97	21.31	22.78	17.25	17.57	18.36	18.70	20.17
	8H	20.02	20.30	21.13	21.41	22.90	17.44	17.72	18.56	18.83	20.32
	12H	20.10	20.35	21.22	21.45	22.98	17.51	17.76	18.63	18.86	20.39
12H	4H	19.39	19.74	20.49	20.84	22.31	16.71	17.07	17.82	18.17	19.64
	6H	19.85	20.13	20.97	21.24	22.73	17.31	17.59	18.42	18.70	20.18
	8H	20.02	20.26	21.14	21.37	22.89	17.51	17.76	18.63	18.86	20.39