

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: P855332

Luminaire Tested: SQ2-PP3-125U-075D-840-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855332
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-840-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

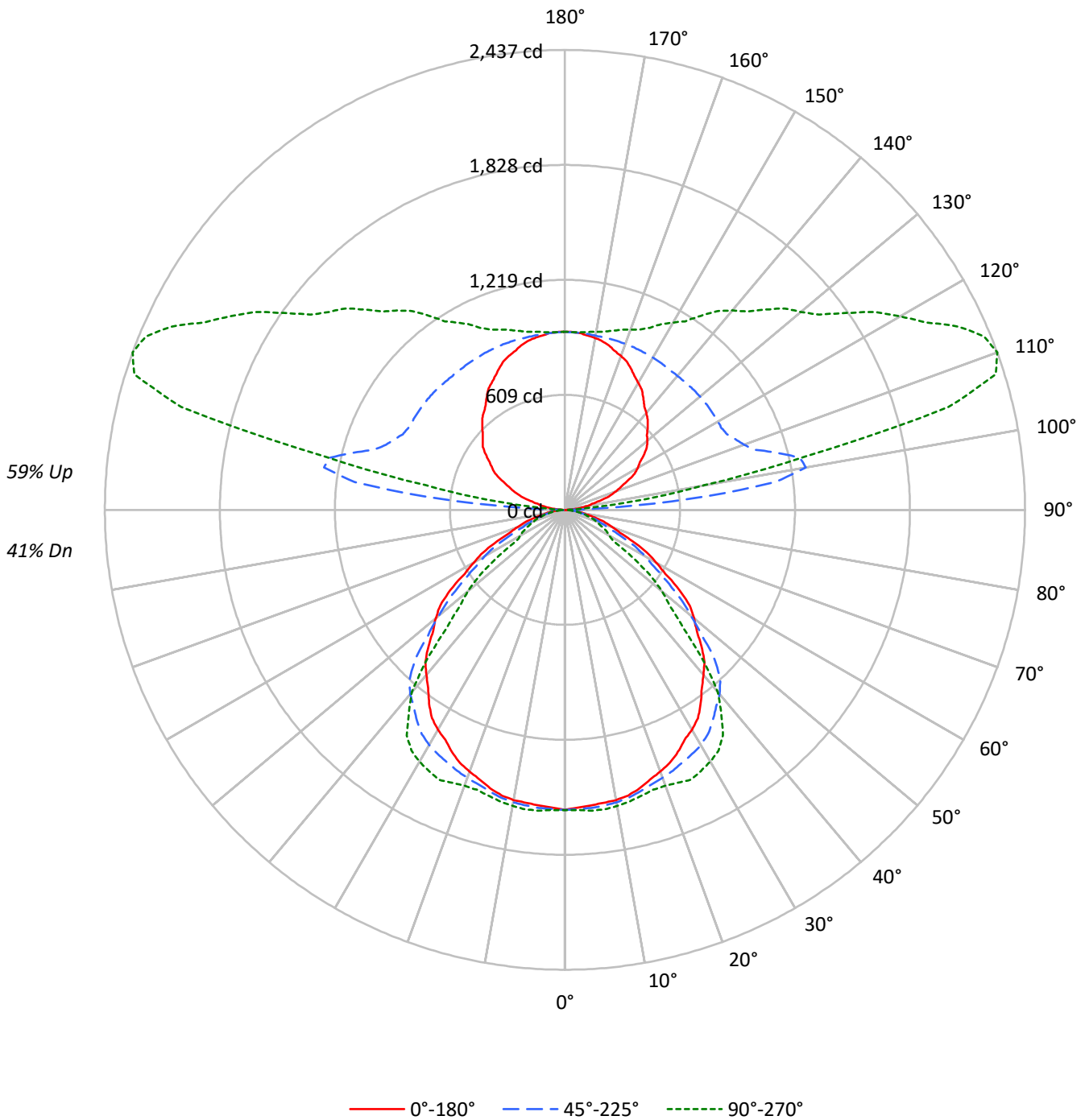
Lumens per Lamp: N/A
Luminaire Lumens: 9824.7 lumens
Efficiency: N/A
Efficacy: 139.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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: P855332

CATALOG NUMBER: SQ2-PP3-125U-075D-840-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P855332

CATALOG NUMBER: SQ2-PP3-125U-075D-840-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	50	30	10	0	
RCR																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41				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°	25678	25678	25678
5°	25477	25695	25939
10°	25607	25799	26130
15°	25544	25797	26191
20°	25362	25969	26720
25°	25219	26297	28124
30°	25076	26828	28711
35°	24721	26909	28763
40°	24059	26860	26574
45°	23341	25642	20228
50°	22423	21876	16849
55°	20870	18410	12116
60°	17970	15797	8686
65°	15156	12202	8542
70°	12619	9607	8176
75°	10692	8291	7654
80°	9066	7197	6881
85°	7169	5910	3742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 25642 cd/sqm



TEST NUMBER: P855332

CATALOG NUMBER: SQ2-PP3-125U-075D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	1.5
10°-20°	438.3	4.5
20°-30°	686.6	7.0
30°-40°	847.0	8.6
40°-50°	797.5	8.1
50°-60°	564.6	5.7
60°-70°	321.7	3.3
70°-80°	159.2	1.6
80°-90°	40.0	0.4
90°-100°	360.7	3.7
100°-110°	1174.5	12.0
110°-120°	1161.7	11.8
120°-130°	949.4	9.7
130°-140°	775.9	7.9
140°-150°	604.4	6.2
150°-160°	435.6	4.4
160°-170°	266.3	2.7
170°-180°	89.8	0.9
0°-30°	1276.3	13.0
0°-40°	2123.3	21.6
0°-60°	3485.5	35.5
0°-90°	4006.3	40.8
90°-120°	2696.9	27.5
90°-150°	5026.6	51.2
90°-180°	5818.0	59.2
0°-180°	9824.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1572	1600	1585	1589	1600	150
15°	1528	1550	1543	1559	1567	431
25°	1416	1452	1476	1536	1579	652
35°	1254	1289	1365	1443	1459	782
45°	1022	1099	1123	952	886	787
55°	741	786	654	493	430	654
65°	397	418	319	225	224	398
75°	171	190	133	124	123	186
85°	39	35	32	25	20	45
90°	0	3	8	7	7	4
95°	49	148	661	236	145	57
105°	200	288	1163	2222	2104	213
115°	369	440	948	1953	2298	365
125°	513	572	935	1542	1818	456
135°	619	684	930	1331	1501	479
145°	724	777	928	1146	1255	453
155°	826	853	934	1026	1065	380
165°	901	909	936	971	982	254
175°	940	940	940	946	944	89
180°	943	943	943	943	943	



TEST NUMBER: P855332

CATALOG NUMBER: SQ2-PP3-125U-075D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.4	1590.4	1590.4	1590.4	1590.4
2.5°	1578.3	1600.7	1586.3	1589.1	1591.7
5°	1571.9	1599.9	1585.4	1589.0	1600.4
7.5°	1565.8	1594.5	1580.3	1586.3	1600.4
10°	1561.9	1586.5	1573.6	1582.3	1593.8
12.5°	1549.8	1573.1	1561.5	1572.8	1583.0
15°	1528.2	1549.5	1543.3	1558.6	1566.9
17.5°	1498.9	1524.9	1524.8	1546.6	1555.1
20°	1476.1	1507.3	1511.4	1538.7	1555.1
22.5°	1451.9	1488.3	1495.2	1536.2	1564.6
25°	1415.6	1451.7	1476.1	1535.9	1578.7
27.5°	1373.2	1409.0	1459.3	1526.3	1560.1
30°	1345.0	1379.5	1439.0	1508.7	1540.0
32.5°	1310.0	1345.8	1409.6	1484.5	1513.0
35°	1254.2	1288.7	1365.2	1442.9	1459.3
37.5°	1190.0	1229.0	1314.7	1358.0	1359.1
40°	1141.5	1192.4	1274.4	1282.3	1260.8
42.5°	1094.4	1159.9	1217.8	1182.4	1087.4
45°	1022.2	1099.4	1123.0	951.8	885.9
47.5°	945.1	1021.5	983.8	798.2	752.8
50°	892.7	965.1	870.9	713.6	670.8
52.5°	833.5	897.9	770.0	632.3	567.2
55°	741.4	785.8	654.0	492.8	430.4
57.5°	630.5	661.7	559.2	369.9	300.0
60°	556.5	581.2	489.2	303.5	269.0
62.5°	489.2	511.3	416.6	263.6	251.5
65°	396.7	418.1	319.4	225.3	223.6
67.5°	315.7	339.0	245.1	196.6	194.7
70°	267.3	291.9	203.5	176.4	173.2
72.5°	226.9	250.3	172.5	155.0	153.0
75°	171.4	189.6	132.9	124.3	122.7
77.5°	124.5	135.9	98.8	94.4	92.8
80°	97.5	102.4	77.4	75.6	74.0
82.5°	73.3	71.7	58.5	56.8	53.8
85°	38.7	35.4	31.9	25.1	20.2
87.5°	12.1	12.8	7.0	5.5	5.5
90°	0.0	3.4	8.2	7.0	7.0
92.5°	16.7	60.0	191.8	63.3	48.7
95°	48.7	148.5	661.1	235.8	145.0
97.5°	91.6	193.2	1122.2	683.4	417.1
100°	119.5	219.3	1295.7	1155.4	749.4
102.5°	151.0	247.2	1274.4	1709.3	1299.7
105°	199.5	288.0	1163.4	2222.1	2104.1
107.5°	252.0	335.2	1058.1	2266.6	2391.6
110°	290.0	365.9	1008.0	2211.3	2437.1



TEST NUMBER: P855332

CATALOG NUMBER: SQ2-PP3-125U-075D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	321.5	396.6	976.5	2111.7	2402.7
115°	368.8	440.3	947.7	1953.1	2297.8
117.5°	417.6	482.0	936.5	1807.8	2151.0
120°	445.4	508.9	933.7	1718.5	2050.8
122.5°	472.3	534.9	934.7	1641.0	1950.5
125°	512.7	571.6	934.9	1542.1	1817.7
127.5°	547.3	607.6	934.7	1467.9	1697.8
130°	569.5	630.8	933.7	1425.6	1630.9
132.5°	589.0	653.0	932.8	1386.4	1578.9
135°	619.4	684.1	930.3	1330.9	1501.0
137.5°	649.1	714.2	927.8	1274.5	1425.6
140°	670.5	732.8	926.8	1236.3	1379.1
142.5°	690.8	750.5	926.8	1199.8	1327.3
145°	723.8	777.1	928.0	1146.2	1255.0
147.5°	755.9	802.1	929.6	1100.6	1184.7
150°	777.2	818.0	931.4	1073.5	1144.9
152.5°	798.5	832.1	932.3	1052.7	1109.6
155°	825.9	853.1	933.7	1026.3	1064.8
157.5°	851.9	871.4	935.1	1006.8	1033.7
160°	867.6	883.5	936.1	994.6	1016.1
162.5°	881.5	893.9	936.1	984.3	1000.4
165°	901.3	909.2	936.1	971.1	982.4
167.5°	915.2	920.2	936.3	961.2	967.2
170°	924.5	926.7	937.2	954.7	956.9
172.5°	931.0	932.3	939.1	951.0	950.5
175°	939.5	939.5	939.5	946.4	944.2
177.5°	943.0	942.1	941.2	945.7	942.1
180°	943.0	943.0	943.0	943.0	943.0



TEST NUMBER: P855332

CATALOG NUMBER: SQ2-PP3-125U-075D-840-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	17.89	18.65	18.93	19.69	21.09	14.29	15.05	15.33	16.09	17.49
	3H	18.98	19.66	20.03	20.71	22.13	15.39	16.06	16.43	17.11	18.53
	4H	19.32	19.96	20.38	21.01	22.44	15.84	16.49	16.90	17.54	18.96
	6H	19.53	20.12	20.60	21.17	22.61	16.18	16.77	17.25	17.83	19.27
	8H	19.57	20.14	20.65	21.21	22.64	16.27	16.83	17.34	17.90	19.33
	12H	19.59	20.12	20.66	21.18	22.64	16.28	16.81	17.36	17.88	19.33
4H	2H	17.99	18.63	19.06	19.68	21.11	14.99	15.63	16.06	16.68	18.11
	3H	19.29	19.82	20.36	20.90	22.34	16.23	16.76	17.31	17.84	19.28
	4H	19.76	20.25	20.84	21.32	22.78	16.78	17.27	17.86	18.34	19.80
	6H	20.09	20.51	21.18	21.60	23.06	17.22	17.63	18.31	18.73	20.18
	8H	20.18	20.57	21.27	21.66	23.13	17.34	17.73	18.42	18.81	20.28
	12H	20.21	20.57	21.32	21.66	23.14	17.36	17.71	18.47	18.81	20.29
8H	4H	19.77	20.16	20.86	21.24	22.71	17.05	17.44	18.14	18.52	19.99
	6H	20.20	20.52	21.31	21.65	23.11	17.59	17.91	18.70	19.04	20.51
	8H	20.35	20.64	21.47	21.74	23.23	17.78	18.06	18.89	19.17	20.65
	12H	20.44	20.68	21.56	21.79	23.31	17.85	18.09	18.97	19.20	20.72
12H	4H	19.72	20.08	20.83	21.17	22.65	17.05	17.40	18.16	18.50	19.98
	6H	20.19	20.47	21.30	21.58	23.06	17.64	17.92	18.76	19.03	20.52
	8H	20.35	20.60	21.47	21.71	23.23	17.85	18.10	18.97	19.20	20.73