

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: P854104

Luminaire Tested: SQ2-PP3-075U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854104
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-075U-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

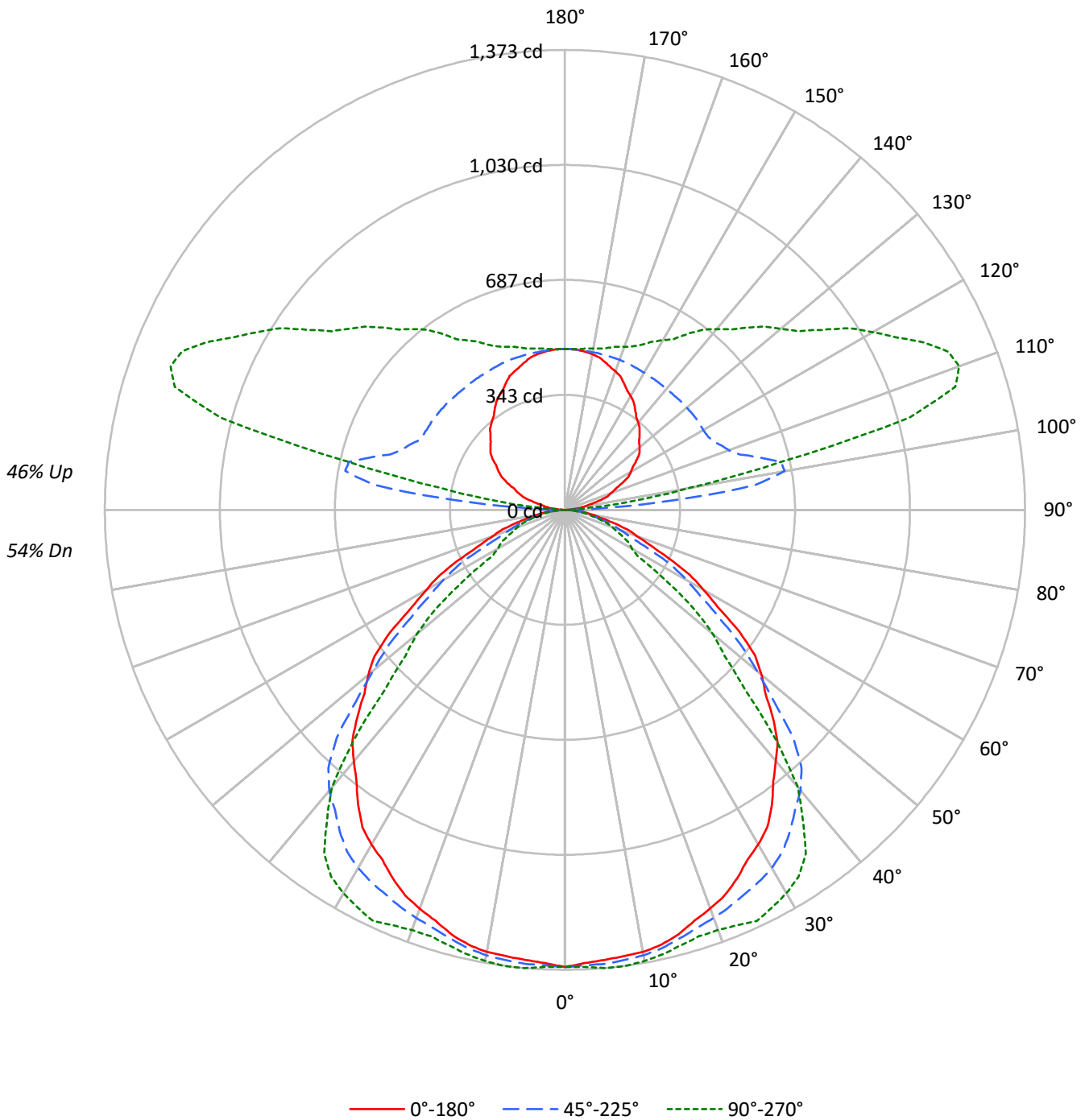
Lumens per Lamp: N/A
Luminaire Lumens: 6413.8 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50
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
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	54		
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	53	52	51	46		
2	91	84	78	73	84	78	73	68	67	63	60	57	54	52	48	46	44	40		
3	83	74	67	61	77	69	63	58	60	55	51	51	47	44	43	40	38	34		
4	76	66	58	52	70	61	55	49	53	48	44	46	42	38	38	36	33	30		
5	70	59	51	45	65	55	48	43	48	42	38	41	37	33	35	32	29	26		
6	65	53	45	39	60	49	42	37	43	37	33	37	33	29	32	28	26	23		
7	60	48	40	34	55	45	38	33	39	34	29	34	29	26	29	26	23	20		
8	56	43	36	31	52	41	34	29	36	30	26	31	27	23	27	23	21	18		
9	52	40	32	27	48	37	31	26	33	27	23	29	24	21	24	21	19	16		
10	48	36	29	24	45	34	28	23	30	25	21	26	22	19	23	19	17	15		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22034	22034	22034
5°	21861	22049	22258
10°	21972	22138	22422
15°	21919	22136	22474
20°	21763	22283	22928
25°	21640	22564	24132
30°	21517	23021	24636
35°	21212	23089	24681
40°	20645	23048	22803
45°	20027	22003	17358
50°	19241	18771	14458
55°	17909	15797	10396
60°	15419	13556	7453
65°	13005	10472	7331
70°	10829	8242	7015
75°	9177	7112	6569
80°	7782	6174	5904
85°	6150	5076	3205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 22003 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	2.0
10°-20°	376.1	5.9
20°-30°	589.2	9.2
30°-40°	726.8	11.3
40°-50°	684.3	10.7
50°-60°	484.5	7.6
60°-70°	276.1	4.3
70°-80°	136.6	2.1
80°-90°	33.9	0.5
90°-100°	181.8	2.8
100°-110°	602.7	9.4
110°-120°	598.2	9.3
120°-130°	487.2	7.6
130°-140°	396.0	6.2
140°-150°	307.5	4.8
150°-160°	221.6	3.5
160°-170°	135.7	2.1
170°-180°	45.8	0.7
0°-30°	1095.2	17.1
0°-40°	1822.0	28.4
0°-60°	2990.8	46.6
0°-90°	3437.3	53.6
90°-120°	1382.7	21.6
90°-150°	2573.4	40.1
90°-180°	2977.0	46.4
0°-180°	6413.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1349	1373	1360	1364	1373	128
15°	1311	1330	1324	1337	1344	370
25°	1215	1246	1267	1318	1355	559
35°	1076	1106	1171	1238	1252	671
45°	877	943	964	817	760	675
55°	636	674	561	423	369	561
65°	340	359	274	193	192	342
75°	147	163	114	107	105	159
85°	33	30	27	22	17	39
90°	0	1	3	4	4	3
95°	26	76	330	118	79	30
105°	106	150	603	1138	1064	111
115°	188	225	486	1011	1182	186
125°	263	292	477	794	937	234
135°	314	347	473	682	769	243
145°	365	392	472	586	642	229
155°	417	432	475	524	543	192
165°	458	463	477	496	501	129
175°	479	479	480	483	482	45
180°	481	481	481	481	481	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.7	1364.7	1364.7	1364.7	1364.7
2.5°	1354.3	1373.5	1361.2	1363.6	1365.8
5°	1348.8	1372.8	1360.4	1363.5	1373.3
7.5°	1343.6	1368.2	1356.0	1361.2	1373.3
10°	1340.2	1361.3	1350.3	1357.7	1367.6
12.5°	1329.8	1349.8	1339.9	1349.6	1358.3
15°	1311.3	1329.6	1324.3	1337.4	1344.5
17.5°	1286.2	1308.5	1308.4	1327.1	1334.4
20°	1266.6	1293.4	1296.9	1320.3	1334.4
22.5°	1245.8	1277.1	1283.0	1318.2	1342.5
25°	1214.7	1245.7	1266.6	1317.9	1354.6
27.5°	1178.3	1209.0	1252.2	1309.7	1338.7
30°	1154.1	1183.7	1234.8	1294.6	1321.4
32.5°	1124.1	1154.8	1209.5	1273.8	1298.3
35°	1076.2	1105.8	1171.4	1238.1	1252.2
37.5°	1021.1	1054.6	1128.1	1165.3	1166.2
40°	979.5	1023.2	1093.5	1100.3	1081.9
42.5°	939.1	995.3	1045.0	1014.6	933.1
45°	877.1	943.4	963.6	816.7	760.2
47.5°	811.0	876.5	844.2	684.9	646.0
50°	766.0	828.1	747.3	612.3	575.6
52.5°	715.2	770.5	660.7	542.6	486.7
55°	636.2	674.3	561.2	422.9	369.3
57.5°	541.0	567.8	479.8	317.4	257.4
60°	477.5	498.7	419.8	260.4	230.8
62.5°	419.8	438.7	357.5	226.2	215.8
65°	340.4	358.8	274.1	193.3	191.9
67.5°	270.9	290.9	210.3	168.7	167.1
70°	229.4	250.5	174.6	151.4	148.6
72.5°	194.7	214.8	148.0	133.0	131.3
75°	147.1	162.7	114.0	106.7	105.3
77.5°	106.8	116.6	84.8	81.0	79.6
80°	83.7	87.9	66.4	64.9	63.5
82.5°	62.9	61.5	50.2	48.7	46.2
85°	33.2	30.4	27.4	21.5	17.3
87.5°	10.4	10.6	5.2	4.3	4.3
90°	0.0	1.0	3.0	4.0	4.0
92.5°	8.0	30.7	90.6	29.4	24.7
95°	25.9	76.5	329.5	117.6	78.6
97.5°	47.6	100.5	575.1	335.4	212.0
100°	62.7	113.3	665.9	571.9	379.2
102.5°	79.4	128.5	660.3	874.0	660.3
105°	105.5	150.3	603.2	1138.0	1064.0
107.5°	132.2	172.1	548.4	1164.8	1221.1
110°	147.3	187.2	520.6	1138.2	1252.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.2	202.4	503.8	1091.2	1236.2
115°	188.1	225.1	485.7	1011.2	1182.4
117.5°	212.8	245.7	479.1	934.7	1114.4
120°	227.9	260.0	476.8	886.8	1061.0
122.5°	241.5	272.8	476.8	847.5	1008.5
125°	262.8	292.0	476.8	794.5	936.6
127.5°	280.3	308.9	475.6	754.4	875.9
130°	290.6	320.8	474.8	731.0	840.0
132.5°	300.2	331.1	474.0	711.7	809.8
135°	314.5	346.6	472.8	681.8	769.4
137.5°	330.0	361.0	471.6	652.9	730.2
140°	340.4	370.6	470.8	633.6	704.7
142.5°	350.0	379.3	471.6	614.4	677.6
145°	365.3	392.5	471.8	586.5	642.0
147.5°	381.8	404.6	472.0	562.9	604.2
150°	392.2	412.6	472.8	549.2	584.3
152.5°	401.7	421.4	473.6	537.9	565.9
155°	417.0	431.6	474.8	524.0	543.4
157.5°	432.0	443.3	476.0	514.1	527.9
160°	439.9	449.7	476.8	506.9	517.6
162.5°	447.9	455.3	476.8	502.0	510.4
165°	457.8	462.7	476.8	495.8	500.6
167.5°	467.0	469.5	477.8	490.2	492.7
170°	471.8	472.8	477.8	487.7	488.7
172.5°	475.0	475.9	478.5	485.3	485.5
175°	478.7	478.7	479.7	482.7	481.7
177.5°	480.7	480.7	479.9	481.5	479.9
180°	480.7	480.7	480.7	480.7	480.7

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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	18.62	19.48	19.55	20.42	21.64	15.01	15.87	15.94	16.82	18.04
	3H	19.71	20.48	20.66	21.43	22.68	16.12	16.88	17.06	17.84	19.09
	4H	20.05	20.78	21.01	21.74	22.99	16.58	17.30	17.54	18.26	19.52
	6H	20.27	20.94	21.24	21.90	23.17	16.93	17.59	17.90	18.56	19.82
	8H	20.32	20.95	21.30	21.93	23.20	17.01	17.65	17.99	18.63	19.89
	12H	20.33	20.94	21.31	21.91	23.20	17.03	17.63	18.01	18.60	19.89
4H	2H	18.73	19.45	19.69	20.41	21.66	15.73	16.45	16.69	17.41	18.66
	3H	20.03	20.63	21.01	21.62	22.89	16.98	17.58	17.95	18.57	19.84
	4H	20.51	21.06	21.49	22.04	23.33	17.53	18.08	18.52	19.06	20.36
	6H	20.85	21.32	21.84	22.32	23.61	17.97	18.44	18.97	19.45	20.74
	8H	20.94	21.38	21.94	22.38	23.68	18.09	18.53	19.09	19.53	20.84
	12H	20.98	21.37	21.99	22.39	23.70	18.12	18.52	19.14	19.53	20.84
8H	4H	20.53	20.97	21.52	21.96	23.27	17.81	18.24	18.80	19.24	20.55
	6H	20.96	21.32	21.98	22.36	23.67	18.35	18.71	19.37	19.76	21.06
	8H	21.11	21.43	22.14	22.46	23.78	18.54	18.86	19.57	19.89	21.21
	12H	21.20	21.48	22.23	22.51	23.87	18.61	18.89	19.64	19.91	21.28
12H	4H	20.49	20.88	21.50	21.90	23.21	17.81	18.21	18.83	19.22	20.54
	6H	20.95	21.27	21.98	22.29	23.62	18.40	18.72	19.43	19.75	21.07
	8H	21.12	21.40	22.15	22.42	23.79	18.61	18.89	19.64	19.92	21.28