

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: P855142

Luminaire Tested: SQ2-PP3-050U-050D-835-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855142
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-050U-050D-835-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

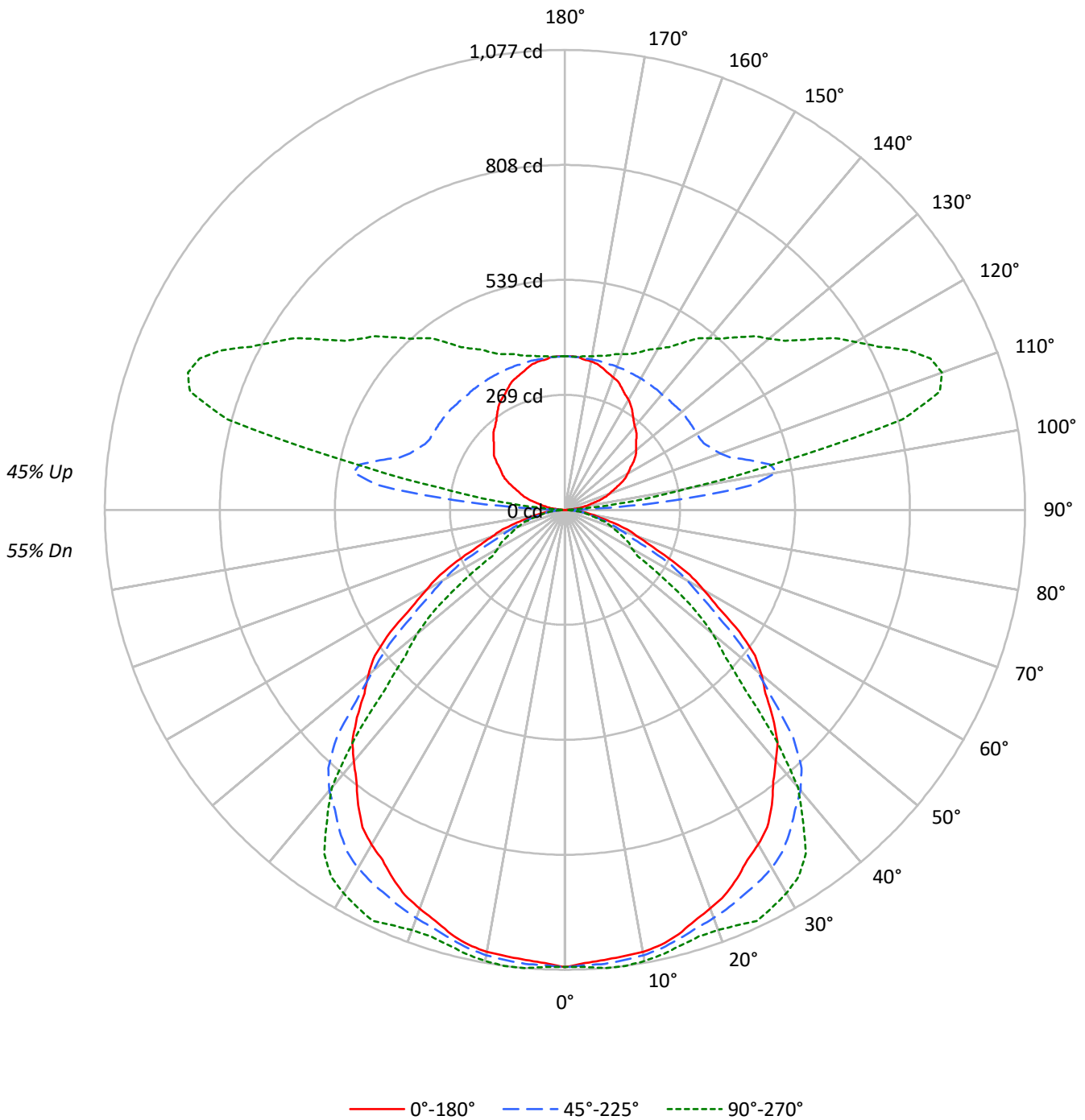
Lumens per Lamp: N/A
Luminaire Lumens: 4931.1 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 32.6
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	92	88	92	89	86	83	76	74	72	65	63	62	54	53	52	47
2	91	84	78	73	84	78	73	69	67	64	60	58	55	52	49	47	45	40
3	83	74	67	61	77	69	63	58	60	55	51	51	48	45	43	41	39	35
4	76	66	58	52	71	62	55	50	54	48	44	46	42	39	39	36	34	30
5	70	59	51	45	65	55	48	43	48	43	38	41	37	34	35	32	30	27
6	65	53	45	39	60	50	43	37	43	38	34	38	33	30	32	29	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	26	29	26	23	21
8	56	44	36	31	52	41	34	29	36	30	26	31	27	24	27	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	24	21	25	21	19	17
10	49	37	29	25	45	34	28	24	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17286	17286	17286
5°	17149	17297	17460
10°	17236	17365	17588
15°	17195	17366	17630
20°	17072	17481	17986
25°	16976	17701	18930
30°	16878	18060	19326
35°	16640	18112	19362
40°	16195	18080	17888
45°	15712	17262	13618
50°	15094	14724	11341
55°	14049	12391	8155
60°	12096	10634	5848
65°	10204	8214	5750
70°	8493	6463	5504
75°	7199	5577	5153
80°	6100	4844	4630
85°	4817	3983	2519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17262 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.9	2.1
10°-20°	295.0	6.0
20°-30°	462.2	9.4
30°-40°	570.2	11.6
40°-50°	536.8	10.9
50°-60°	380.1	7.7
60°-70°	216.6	4.4
70°-80°	107.1	2.2
80°-90°	26.7	0.5
90°-100°	143.3	2.9
100°-110°	454.6	9.2
110°-120°	445.8	9.0
120°-130°	362.7	7.4
130°-140°	295.8	6.0
140°-150°	230.6	4.7
150°-160°	166.1	3.4
160°-170°	101.5	2.1
170°-180°	34.3	0.7
0°-30°	859.1	17.4
0°-40°	1429.3	29.0
0°-60°	2346.2	47.6
0°-90°	2696.5	54.7
90°-120°	1043.6	21.2
90°-150°	1932.7	39.2
90°-180°	2235.0	45.3
0°-180°	4931.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1058	1077	1067	1070	1077	101
15°	1029	1043	1039	1049	1055	290
25°	953	977	994	1034	1063	439
35°	844	867	919	971	982	526
45°	688	740	756	641	596	530
55°	499	529	440	332	290	440
65°	267	281	215	152	150	268
75°	115	128	89	84	83	125
85°	26	24	22	17	14	30
90°	0	1	3	3	3	2
95°	19	58	260	96	62	22
105°	79	111	448	854	818	84
115°	142	168	362	752	885	140
125°	196	219	356	590	695	174
135°	236	260	354	507	572	183
145°	276	297	354	438	476	173
155°	315	326	355	391	406	145
165°	343	346	356	370	373	97
175°	359	358	359	361	360	34
180°	360	360	360	360	360	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1070.6	1070.6	1070.6	1070.6	1070.6
2.5°	1062.4	1077.5	1067.8	1069.6	1071.5
5°	1058.1	1076.9	1067.2	1069.6	1077.3
7.5°	1054.0	1073.3	1063.8	1067.8	1077.3
10°	1051.3	1068.0	1059.2	1065.1	1072.8
12.5°	1043.2	1058.9	1051.1	1058.7	1065.6
15°	1028.7	1043.1	1038.9	1049.2	1054.7
17.5°	1009.0	1026.5	1026.4	1041.0	1046.8
20°	993.6	1014.6	1017.4	1035.7	1046.8
22.5°	977.3	1001.9	1006.5	1034.1	1053.1
25°	952.9	977.2	993.6	1033.9	1062.6
27.5°	924.3	948.4	982.3	1027.4	1050.2
30°	905.3	928.5	968.7	1015.6	1036.6
32.5°	881.8	905.9	948.8	999.3	1018.5
35°	844.2	867.4	918.9	971.2	982.3
37.5°	801.0	827.4	885.0	914.2	914.8
40°	768.4	802.7	857.8	863.1	848.7
42.5°	736.7	780.7	819.8	795.9	732.0
45°	688.1	740.1	756.0	640.6	596.4
47.5°	636.2	687.6	662.2	537.3	506.8
50°	600.9	649.6	586.2	480.3	451.5
52.5°	561.1	604.4	518.3	425.6	381.8
55°	499.1	528.9	440.2	331.8	289.7
57.5°	424.4	445.4	376.4	249.1	201.9
60°	374.6	391.2	329.3	204.3	181.1
62.5°	329.3	344.1	280.4	177.4	169.3
65°	267.1	281.4	215.0	151.6	150.5
67.5°	212.5	228.3	165.0	132.4	131.0
70°	179.9	196.6	136.9	118.8	116.6
72.5°	152.8	168.5	116.1	104.3	103.0
75°	115.4	127.7	89.4	83.7	82.6
77.5°	83.7	91.4	66.5	63.6	62.5
80°	65.6	68.9	52.1	50.9	49.8
82.5°	49.3	48.2	39.4	38.3	36.2
85°	26.0	23.8	21.5	16.9	13.6
87.5°	8.1	8.4	4.3	3.4	3.4
90°	0.0	1.1	3.4	3.4	3.4
92.5°	6.3	25.1	80.3	26.7	18.8
95°	19.2	57.9	260.3	96.5	62.2
97.5°	35.8	75.1	440.9	275.4	169.1
100°	47.5	85.1	502.5	458.0	297.6
102.5°	60.2	96.1	491.6	672.7	514.9
105°	79.2	111.2	448.1	853.5	818.1
107.5°	98.2	127.9	406.7	872.4	920.2
110°	110.9	139.6	385.9	850.7	939.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	123.6	150.5	374.1	813.2	925.6
115°	141.5	168.1	362.1	752.1	884.8
117.5°	158.9	184.1	357.4	693.3	827.1
120°	169.7	194.1	356.5	656.9	786.4
122.5°	180.6	204.0	356.5	627.8	748.4
125°	195.8	219.0	356.5	589.7	694.7
127.5°	209.1	231.4	356.5	560.2	649.7
130°	217.3	240.5	356.5	542.7	623.4
132.5°	225.4	248.6	355.6	528.9	601.8
135°	236.5	259.7	354.2	507.2	571.5
137.5°	247.4	271.7	354.0	486.5	543.9
140°	254.6	279.0	353.1	471.9	524.0
142.5°	263.7	287.1	354.0	457.3	505.9
145°	276.1	297.2	354.2	437.6	476.4
147.5°	288.6	306.5	354.4	420.3	452.0
150°	297.6	312.0	355.3	410.2	435.7
152.5°	304.9	317.4	355.3	402.0	423.0
155°	314.6	325.7	355.3	390.8	406.3
157.5°	325.0	332.5	356.5	383.9	394.5
160°	330.4	337.0	356.5	379.2	388.2
162.5°	335.9	340.7	356.5	375.6	381.8
165°	342.9	346.2	356.5	370.1	373.4
167.5°	349.5	350.4	357.6	366.2	369.1
170°	353.1	353.1	357.6	364.4	365.5
172.5°	354.9	355.8	357.6	362.6	362.8
175°	358.7	357.6	358.7	360.9	359.9
177.5°	359.9	359.0	359.0	360.7	359.0
180°	359.9	359.9	359.9	359.9	359.9



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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	17.87	18.74	18.79	19.68	20.88	14.27	15.14	15.19	16.07	17.28
	3H	18.97	19.74	19.90	20.69	21.92	15.37	16.15	16.31	17.09	18.32
	4H	19.31	20.04	20.26	20.99	22.23	15.84	16.57	16.79	17.52	18.76
	6H	19.52	20.20	20.49	21.16	22.41	16.18	16.86	17.14	17.81	19.06
	8H	19.57	20.22	20.54	21.19	22.44	16.27	16.91	17.24	17.88	19.13
	12H	19.59	20.20	20.56	21.16	22.44	16.28	16.89	17.26	17.86	19.13
4H	2H	17.98	18.71	18.94	19.66	20.90	14.98	15.71	15.94	16.66	17.90
	3H	19.29	19.90	20.26	20.88	22.13	16.23	16.84	17.20	17.82	19.07
	4H	19.76	20.32	20.74	21.29	22.57	16.79	17.34	17.76	18.32	19.59
	6H	20.10	20.58	21.09	21.58	22.85	17.23	17.70	18.22	18.70	19.98
	8H	20.20	20.64	21.18	21.63	22.92	17.35	17.79	18.34	18.79	20.08
	12H	20.23	20.63	21.24	21.64	22.94	17.38	17.78	18.39	18.79	20.08
8H	4H	19.78	20.23	20.77	21.22	22.51	17.06	17.51	18.05	18.50	19.79
	6H	20.21	20.58	21.23	21.61	22.90	17.61	17.97	18.62	19.01	20.30
	8H	20.37	20.69	21.39	21.72	23.02	17.79	18.12	18.82	19.14	20.45
	12H	20.46	20.74	21.48	21.76	23.11	17.87	18.15	18.89	19.17	20.52
12H	4H	19.74	20.14	20.75	21.15	22.45	17.07	17.47	18.08	18.48	19.77
	6H	20.20	20.53	21.22	21.55	22.85	17.66	17.98	18.68	19.01	20.31
	8H	20.37	20.66	21.40	21.67	23.03	17.87	18.16	18.89	19.17	20.52