

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: P854098

Luminaire Tested: SQ2-PP3-050U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854098
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-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

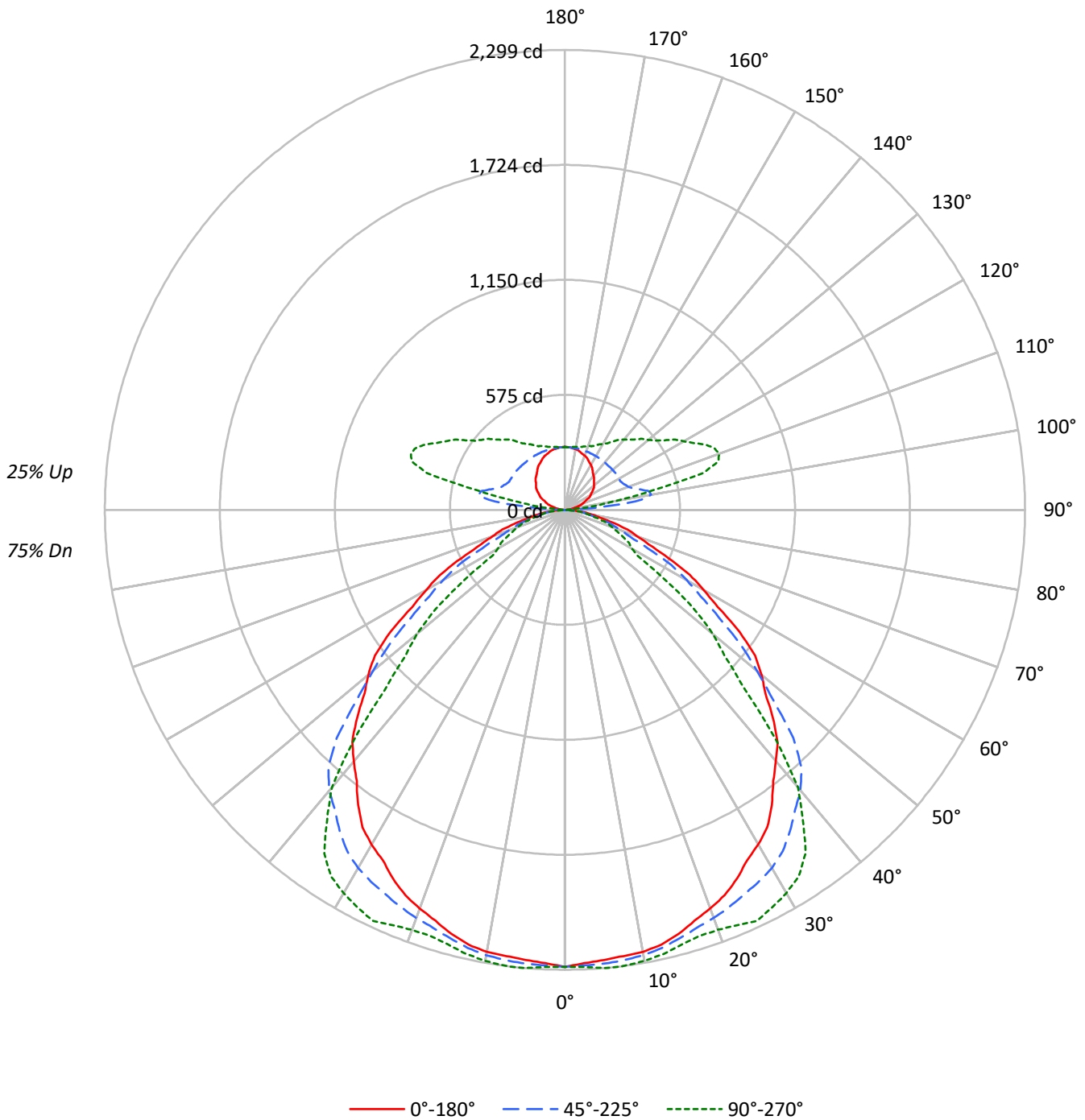
Lumens per Lamp: N/A
Luminaire Lumens: 7704.0 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64
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	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79	75
1	104	100	96	93	99	95	92	89	87	84	82	78	77	75	71	70	68	65
2	95	88	82	77	91	84	79	74	77	73	69	70	67	64	63	61	59	55
3	88	78	71	65	83	75	68	63	68	63	59	62	58	55	57	53	51	48
4	80	70	62	56	76	67	60	54	61	55	51	56	51	47	51	47	44	41
5	74	62	54	48	70	60	52	47	55	49	44	51	45	41	46	42	39	36
6	69	56	48	42	65	54	47	41	50	44	39	46	41	37	42	38	34	32
7	64	51	43	37	60	49	42	36	45	39	34	42	37	33	39	34	31	28
8	59	47	39	33	56	45	38	32	42	35	31	38	33	29	35	31	28	25
9	55	43	35	30	53	41	34	29	38	32	28	35	30	26	33	28	25	23
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	30	26	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36887	36887	36887
5°	36598	36911	37263
10°	36784	37061	37536
15°	36695	37058	37623
20°	36433	37304	38383
25°	36227	37775	40399
30°	36019	38542	41243
35°	35510	38652	41319
40°	34562	38583	38177
45°	33529	36838	29060
50°	32212	31423	24204
55°	29979	26446	17405
60°	25814	22695	12478
65°	21776	17532	12271
70°	18128	13794	11745
75°	15365	11903	10998
80°	13027	10330	9884
85°	10282	8503	5372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 36838 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.5	2.8
10°-20°	629.6	8.2
20°-30°	986.3	12.8
30°-40°	1216.8	15.8
40°-50°	1145.6	14.9
50°-60°	811.1	10.5
60°-70°	462.2	6.0
70°-80°	228.7	3.0
80°-90°	56.3	0.7
90°-100°	125.1	1.6
100°-110°	396.7	5.1
110°-120°	389.0	5.0
120°-130°	316.5	4.1
130°-140°	258.1	3.4
140°-150°	201.2	2.6
150°-160°	145.0	1.9
160°-170°	88.6	1.1
170°-180°	29.9	0.4
0°-30°	1833.5	23.8
0°-40°	3050.2	39.6
0°-60°	5006.9	65.0
0°-90°	5754.0	74.7
90°-120°	910.7	11.8
90°-150°	1686.5	21.9
90°-180°	1950.0	25.3
0°-180°	7704.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2258	2298	2277	2283	2299	215
15°	2195	2226	2217	2239	2251	619
25°	2034	2085	2120	2206	2268	937
35°	1802	1851	1961	2073	2096	1124
45°	1468	1579	1613	1367	1273	1130
55°	1065	1129	940	708	618	940
65°	570	601	459	324	321	572
75°	246	272	191	179	176	267
85°	56	51	46	36	29	65
90°	0	1	3	3	3	3
95°	17	51	227	84	54	19
105°	69	97	391	745	714	73
115°	123	147	316	656	772	122
125°	171	191	311	515	606	152
135°	206	227	309	443	499	159
145°	241	259	309	382	416	151
155°	274	284	310	341	354	127
165°	299	302	311	323	326	84
175°	313	312	313	315	314	30
180°	314	314	314	314	314	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2284.6	2284.6	2284.6	2284.6	2284.6
2.5°	2267.3	2299.4	2278.8	2282.8	2286.6
5°	2258.1	2298.2	2277.4	2282.6	2299.1
7.5°	2249.4	2290.5	2270.2	2278.8	2299.1
10°	2243.6	2279.0	2260.5	2272.9	2289.5
12.5°	2226.2	2259.7	2243.1	2259.4	2274.0
15°	2195.3	2226.0	2217.0	2239.0	2250.8
17.5°	2153.3	2190.6	2190.5	2221.6	2233.9
20°	2120.4	2165.3	2171.1	2210.3	2233.9
22.5°	2085.6	2138.1	2147.9	2206.8	2247.5
25°	2033.5	2085.4	2120.4	2206.3	2267.7
27.5°	1972.6	2024.1	2096.3	2192.5	2241.2
30°	1932.0	1981.6	2067.3	2167.3	2212.2
32.5°	1881.8	1933.3	2024.8	2132.5	2173.5
35°	1801.6	1851.2	1961.0	2072.7	2096.3
37.5°	1709.4	1765.6	1888.6	1950.9	1952.3
40°	1639.8	1713.0	1830.6	1842.0	1811.3
42.5°	1572.2	1666.2	1749.5	1698.5	1562.1
45°	1468.4	1579.3	1613.3	1367.2	1272.7
47.5°	1357.7	1467.3	1413.3	1146.6	1081.5
50°	1282.4	1386.3	1251.0	1025.0	963.6
52.5°	1197.4	1290.0	1106.1	908.4	814.8
55°	1065.0	1128.8	939.5	708.0	618.3
57.5°	905.6	950.5	803.2	531.4	430.8
60°	799.4	834.8	702.8	436.0	386.4
62.5°	702.8	734.4	598.5	378.8	361.3
65°	570.0	600.7	458.9	323.6	321.2
67.5°	453.5	487.1	352.1	282.5	279.7
70°	384.0	419.4	292.2	253.5	248.8
72.5°	326.0	359.6	247.8	222.6	219.8
75°	246.3	272.3	190.8	178.7	176.3
77.5°	178.7	195.2	142.0	135.7	133.3
80°	140.1	147.2	111.1	108.6	106.3
82.5°	105.3	102.9	84.0	81.5	77.3
85°	55.5	50.8	45.9	36.1	29.0
87.5°	17.4	17.6	8.3	6.4	6.4
90°	0.0	1.0	3.0	3.0	3.0
92.5°	5.5	21.9	70.1	23.3	16.4
95°	16.8	50.6	227.1	84.2	54.3
97.5°	31.2	65.6	384.7	240.4	147.5
100°	41.5	74.3	438.4	399.7	259.7
102.5°	52.5	83.8	428.9	587.0	449.3
105°	69.1	97.1	391.0	744.8	713.9
107.5°	85.7	111.6	354.9	761.3	803.0
110°	96.8	121.9	336.7	742.3	819.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	131.4	326.4	709.6	807.7
115°	123.4	146.6	316.0	656.3	772.2
117.5°	138.6	160.6	311.8	605.0	721.8
120°	148.1	169.4	311.0	573.3	686.3
122.5°	157.6	178.1	311.0	547.8	653.1
125°	170.8	191.1	311.0	514.6	606.3
127.5°	182.5	202.0	311.0	488.8	567.0
130°	189.6	209.9	311.0	473.6	544.1
132.5°	196.7	217.0	310.3	461.6	525.1
135°	206.4	226.6	309.1	442.7	498.7
137.5°	215.9	237.1	308.9	424.5	474.6
140°	222.2	243.4	308.1	411.8	457.2
142.5°	230.1	250.5	308.9	399.1	441.4
145°	240.9	259.3	309.1	381.9	415.7
147.5°	251.8	267.4	309.3	366.8	394.4
150°	259.7	272.2	310.1	358.0	380.2
152.5°	266.0	277.0	310.1	350.8	369.1
155°	274.5	284.2	310.1	341.0	354.5
157.5°	283.6	290.2	311.0	335.0	344.2
160°	288.3	294.1	311.0	331.0	338.7
162.5°	293.1	297.3	311.0	327.8	333.2
165°	299.2	302.1	311.0	323.0	325.9
167.5°	304.9	305.7	312.0	319.6	322.1
170°	308.1	308.1	312.0	318.0	318.9
172.5°	309.7	310.4	312.0	316.4	316.6
175°	313.0	312.1	313.0	315.0	314.0
177.5°	314.0	313.2	313.2	314.8	313.2
180°	314.0	314.0	314.0	314.0	314.0



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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	22.13	23.21	22.85	23.95	24.82	18.52	19.61	19.24	20.34	21.21
	3H	23.24	24.21	23.98	24.95	25.86	19.65	20.61	20.38	21.36	22.26
	4H	23.59	24.50	24.35	25.26	26.17	20.12	21.03	20.87	21.78	22.70
	6H	23.82	24.66	24.59	25.42	26.35	20.48	21.32	21.24	22.08	23.01
	8H	23.88	24.67	24.65	25.46	26.39	20.57	21.37	21.34	22.15	23.08
	12H	23.90	24.66	24.68	25.43	26.39	20.59	21.35	21.37	22.13	23.08
4H	2H	22.27	23.17	23.02	23.93	24.85	19.27	20.18	20.02	20.93	21.85
	3H	23.60	24.35	24.36	25.14	26.07	20.54	21.29	21.31	22.08	23.01
	4H	24.08	24.76	24.86	25.55	26.51	21.10	21.78	21.89	22.57	23.54
	6H	24.43	25.01	25.23	25.83	26.80	21.55	22.14	22.36	22.96	23.93
	8H	24.52	25.07	25.33	25.88	26.87	21.68	22.23	22.48	23.04	24.02
	12H	24.57	25.06	25.39	25.90	26.88	21.72	22.21	22.54	23.04	24.03
8H	4H	24.11	24.66	24.92	25.47	26.45	21.39	21.94	22.20	22.75	23.73
	6H	24.55	25.00	25.38	25.86	26.84	21.94	22.40	22.78	23.25	24.23
	8H	24.71	25.11	25.55	25.96	26.96	22.13	22.53	22.97	23.39	24.38
	12H	24.80	25.16	25.65	26.00	27.06	22.21	22.57	23.06	23.41	24.47
12H	4H	24.08	24.57	24.90	25.41	26.39	21.41	21.90	22.23	22.73	23.72
	6H	24.54	24.94	25.38	25.79	26.79	22.00	22.40	22.84	23.25	24.25
	8H	24.72	25.08	25.56	25.92	26.97	22.22	22.57	23.06	23.41	24.47