

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:

Luminaire Tested: SQ4-PW1-125U-075D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-125U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

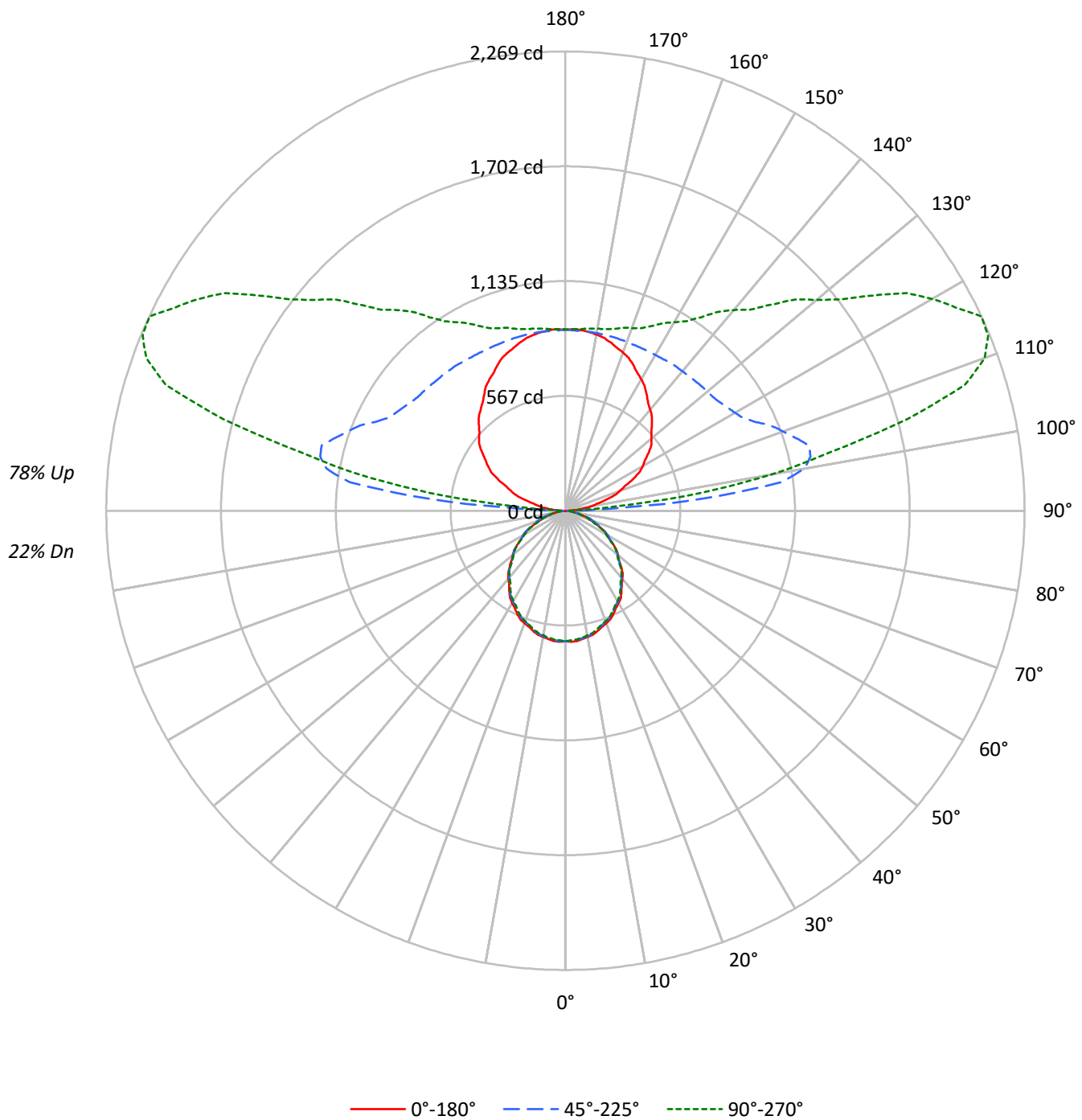
Lumens per Lamp: N/A
Luminaire Lumens: 7417.1 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 87.9
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	101	101	101	101	89	89	89	89	68	68	68	48	48	48	31	31	31
1	92	87	84	80	81	78	75	72	59	57	56	43	41	40	27	26	26
2	83	76	71	66	74	68	63	59	52	49	46	37	35	34	24	23	22
3	76	67	60	55	67	60	54	49	46	42	39	33	30	28	21	20	19
4	69	59	52	46	61	53	46	42	41	36	33	29	27	24	19	17	16
5	64	53	45	39	56	47	40	35	36	32	28	26	23	21	17	15	14
6	58	47	39	34	52	42	35	31	32	28	24	24	21	18	15	14	12
7	54	42	35	29	48	38	31	27	29	25	21	21	18	16	14	12	11
8	50	38	31	26	44	34	28	23	27	22	19	19	16	14	13	11	10
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	12	10	9
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3967	3967	3967
5°	3992	3961	3943
10°	3960	3929	3907
15°	3918	3875	3861
20°	3872	3812	3805
25°	3817	3748	3737
30°	3737	3680	3656
35°	3630	3579	3558
40°	3518	3463	3449
45°	3380	3336	3321
50°	3240	3213	3191
55°	3089	3089	3040
60°	2901	2956	2852
65°	2655	2787	2588
70°	2340	2564	2279
75°	1999	2296	1944
80°	1551	1930	1569
85°	1002	1482	1327

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3380 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	0.8
10°-20°	171.4	2.3
20°-30°	254.3	3.4
30°-40°	297.6	4.0
40°-50°	296.2	4.0
50°-60°	255.8	3.4
60°-70°	184.1	2.5
70°-80°	96.6	1.3
80°-90°	26.0	0.4
90°-100°	418.4	5.6
100°-110°	1127.1	15.2
110°-120°	1182.9	15.9
120°-130°	959.9	12.9
130°-140°	752.8	10.1
140°-150°	578.0	7.8
150°-160°	415.6	5.6
160°-170°	253.9	3.4
170°-180°	85.6	1.2
0°-30°	486.5	6.6
0°-40°	784.1	10.6
0°-60°	1336.1	18.0
0°-90°	1642.9	22.2
90°-120°	2728.4	36.8
90°-150°	5019.1	67.7
90°-180°	5774.0	77.8
0°-180°	7417.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	647	639	642	640	639	61
15°	615	608	608	607	606	173
25°	562	553	552	549	551	259
35°	484	477	477	472	474	302
45°	389	385	384	382	382	300
55°	288	288	288	284	284	257
65°	182	188	192	184	178	181
75°	84	92	97	90	82	90
85°	14	19	21	20	19	19
90°	2	7	14	15	15	5
95°	64	228	686	351	243	67
105°	208	324	1246	1865	1750	219
115°	368	450	1038	2006	2269	362
125°	502	577	932	1575	1854	449
135°	605	675	906	1271	1439	467
145°	700	754	894	1087	1167	439
155°	794	823	886	975	1006	366
165°	861	871	890	925	930	243
175°	896	894	891	904	901	85
180°	894	894	894	894	894	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	644.9	644.9	644.9	644.9	644.9
2.5°	648.5	643.2	644.9	643.5	640.3
5°	646.6	639.4	641.5	639.8	638.6
7.5°	640.0	633.3	634.9	633.1	632.4
10°	634.1	627.4	629.0	626.7	625.6
12.5°	627.3	620.2	621.7	619.4	618.8
15°	615.3	607.6	608.5	607.4	606.3
17.5°	601.5	593.6	593.8	591.9	591.7
20°	591.5	583.2	582.4	580.1	581.3
22.5°	580.6	571.8	571.0	567.9	569.4
25°	562.5	553.1	552.3	548.9	550.6
27.5°	541.6	532.3	532.3	527.5	529.3
30°	526.1	517.3	518.2	512.6	514.8
32.5°	509.8	501.8	502.3	496.6	498.9
35°	483.5	476.9	476.7	472.2	473.9
37.5°	456.7	450.8	449.9	447.3	447.7
40°	438.1	433.1	431.3	429.6	429.6
42.5°	418.5	414.0	412.2	410.9	410.5
45°	388.6	385.3	383.5	382.4	381.8
47.5°	359.1	356.0	354.4	353.6	353.1
50°	338.6	336.4	335.8	334.1	333.5
52.5°	318.2	316.9	316.3	314.1	313.5
55°	288.1	287.5	288.1	284.1	283.5
57.5°	256.7	257.6	259.4	254.1	252.7
60°	235.8	238.0	240.3	234.0	231.8
62.5°	214.4	218.0	221.3	214.0	210.9
65°	182.4	187.9	191.5	184.0	177.8
67.5°	151.5	158.4	162.6	154.5	147.6
70°	130.1	137.9	142.6	134.5	126.7
72.5°	111.5	120.1	124.0	116.3	108.5
75°	84.1	91.9	96.6	90.2	81.8
77.5°	59.7	67.0	70.9	65.3	58.4
80°	43.8	51.5	54.5	49.9	44.3
82.5°	31.0	37.5	39.5	36.7	33.0
85°	14.2	18.6	21.0	19.9	18.8
87.5°	4.1	8.1	11.4	11.6	12.1
90°	2.3	6.7	13.7	14.8	14.8
92.5°	27.8	98.2	194.2	93.5	64.9
95°	63.8	227.6	685.9	350.8	242.7
97.5°	101.9	260.5	1075.8	898.8	677.7
100°	131.0	273.6	1199.8	1255.3	1041.4
102.5°	159.3	292.1	1240.8	1522.4	1346.8
105°	208.5	324.4	1246.5	1864.9	1750.2
107.5°	255.0	358.4	1193.4	2040.9	2070.6
110°	286.0	384.0	1145.1	2095.6	2203.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	318.8	409.7	1098.6	2083.5	2261.1
115°	368.0	450.5	1038.0	2005.7	2268.6
117.5°	412.9	490.2	991.1	1881.5	2174.3
120°	442.1	516.7	967.4	1792.3	2093.1
122.5°	467.6	541.4	950.1	1701.1	2001.1
125°	502.5	577.1	932.1	1575.3	1853.8
127.5°	536.0	609.5	920.7	1464.3	1713.0
130°	556.0	629.6	916.1	1400.8	1619.1
132.5°	576.1	648.7	911.5	1344.8	1545.3
135°	605.0	675.2	905.8	1270.9	1439.1
137.5°	632.6	699.9	902.9	1208.2	1346.3
140°	651.8	716.4	900.1	1169.6	1294.4
142.5°	671.8	732.0	898.3	1133.6	1238.8
145°	699.6	754.2	894.5	1086.6	1166.8
147.5°	729.7	777.2	890.6	1047.0	1110.0
150°	749.7	791.0	888.8	1022.1	1074.5
152.5°	768.0	803.8	887.8	1001.8	1044.4
155°	794.2	823.1	886.5	974.9	1006.1
157.5°	817.2	839.7	886.7	956.0	976.9
160°	831.8	850.7	887.6	944.9	960.5
162.5°	844.5	859.9	888.5	935.7	946.9
165°	861.4	871.4	889.9	925.3	929.8
167.5°	875.1	880.9	891.0	917.3	919.1
170°	884.2	886.4	891.0	912.7	912.7
172.5°	889.7	890.1	891.9	908.1	908.1
175°	895.6	894.5	891.0	903.5	901.3
177.5°	898.1	896.3	891.7	899.0	897.2
180°	894.5	894.5	894.5	894.5	894.5

(END OF REPORT)