

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-BB-075U-075D-927-1D-UNV-STD-W-8

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-075D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

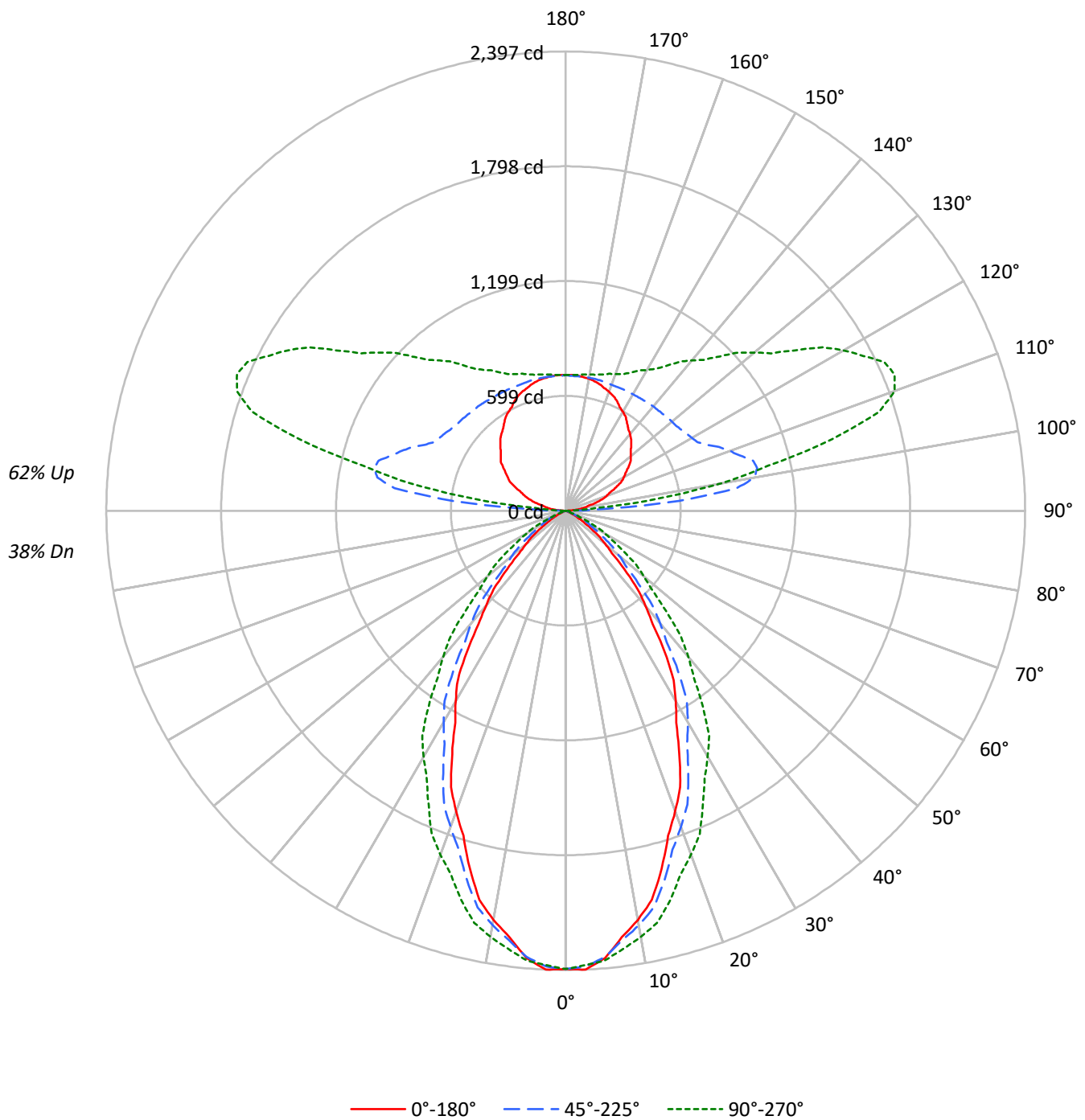
Lumens per Lamp: N/A
Luminaire Lumens: 7465.2 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 91
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11033	11033	11033
5°	10855	10828	10909
10°	10157	10292	10580
15°	9234	9526	10057
20°	8196	8622	9378
25°	7138	7703	8616
30°	6114	6786	7895
35°	5070	5760	7024
40°	3895	4606	5985
45°	2816	3488	4816
50°	1918	2599	3819
55°	1247	1880	2969
60°	715	1324	2146
65°	190	809	1086
70°	93	250	312
75°	41	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4816 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	2.9
10°-20°	558.2	7.5
20°-30°	698.8	9.4
30°-40°	645.4	8.6
40°-50°	433.7	5.8
50°-60°	224.0	3.0
60°-70°	70.2	0.9
70°-80°	4.4	0.1
80°-90°	1.9	0.0
90°-100°	333.8	4.5
100°-110°	918.3	12.3
110°-120°	947.9	12.7
120°-130°	759.5	10.2
130°-140°	596.5	8.0
140°-150°	457.1	6.1
150°-160°	328.7	4.4
160°-170°	201.0	2.7
170°-180°	67.7	0.9
0°-30°	1475.2	19.8
0°-40°	2120.6	28.4
0°-60°	2778.3	37.2
0°-90°	2854.8	38.2
90°-120°	2200.0	29.5
90°-150°	4013.1	53.8
90°-180°	4610.0	61.8
0°-180°	7465.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2392	2392	2392	2392	2392	
5°	2344	2320	2338	2347	2356	217
15°	1933	1927	1995	2062	2106	538
25°	1402	1414	1513	1617	1693	643
35°	900	923	1023	1143	1247	558
45°	432	458	535	639	738	339
55°	155	181	234	300	369	145
65°	17	33	74	89	100	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	10	14	14	3
95°	50	182	590	252	161	52
105°	164	252	1012	1541	1438	173
115°	291	354	812	1616	1834	287
125°	400	456	736	1246	1459	357
135°	483	536	715	1007	1140	373
145°	559	597	705	858	924	350
155°	632	653	700	771	794	291
165°	684	692	703	732	736	193
175°	708	709	705	714	712	67
180°	708	708	708	708	708	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2391.6	2391.6	2391.6	2391.6	2391.6
2.5°	2397.2	2374.5	2380.5	2380.4	2374.0
5°	2344.2	2320.4	2338.4	2346.7	2355.7
7.5°	2245.1	2226.6	2261.1	2287.0	2305.8
10°	2168.3	2152.5	2197.2	2232.5	2258.6
12.5°	2079.4	2067.2	2121.3	2169.8	2203.0
15°	1933.4	1926.6	1994.7	2061.7	2105.8
17.5°	1777.0	1776.8	1854.5	1937.6	1990.8
20°	1669.6	1673.0	1756.4	1848.1	1910.3
22.5°	1562.2	1570.2	1659.2	1754.8	1826.1
25°	1402.3	1413.7	1513.4	1617.0	1692.8
27.5°	1248.7	1265.2	1370.2	1477.8	1570.1
30°	1147.8	1167.0	1273.9	1387.1	1482.2
32.5°	1048.7	1071.6	1175.8	1295.5	1392.4
35°	900.2	922.8	1022.8	1143.2	1247.3
37.5°	746.8	768.9	866.6	985.1	1097.6
40°	646.8	671.7	764.8	879.6	993.9
42.5°	556.1	581.0	668.5	781.4	889.3
45°	431.6	457.6	534.6	638.6	738.2
47.5°	328.4	356.7	424.2	518.3	609.1
50°	267.3	295.6	362.2	445.1	532.2
52.5°	218.2	245.6	305.7	383.9	463.7
55°	155.0	181.1	233.7	300.1	369.1
57.5°	107.1	129.5	176.8	232.2	286.3
60°	77.5	99.0	143.5	188.4	232.6
62.5°	51.6	71.3	114.8	149.2	178.9
65°	17.4	33.2	74.1	89.3	99.5
67.5°	8.8	10.6	38.9	41.0	44.4
70°	6.9	6.9	18.5	19.7	23.1
72.5°	5.1	5.1	7.4	9.5	10.2
75°	2.3	2.3	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.7	2.7
90°	1.5	5.9	10.5	13.6	13.6
92.5°	20.8	88.8	153.9	59.1	48.5
95°	49.7	182.2	590.3	252.4	161.1
97.5°	81.0	202.0	900.7	694.0	489.7
100°	103.9	214.3	998.3	1007.7	822.1
102.5°	125.6	228.9	1023.6	1250.1	1079.9
105°	164.1	252.5	1011.9	1541.1	1438.0
107.5°	200.9	281.5	954.3	1683.5	1714.2
110°	227.4	301.0	911.0	1719.0	1825.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	251.5	322.7	867.6	1696.1	1857.5
115°	290.6	353.9	811.6	1616.1	1834.0
117.5°	328.0	386.3	776.1	1503.8	1750.3
120°	350.8	406.8	760.4	1419.7	1674.4
122.5°	371.3	427.3	749.6	1345.9	1587.7
125°	400.5	456.5	736.3	1245.6	1459.1
127.5°	428.2	481.5	727.6	1161.9	1349.2
130°	442.7	497.2	722.8	1112.1	1282.9
132.5°	459.6	514.0	719.1	1068.4	1222.7
135°	483.3	536.4	715.2	1007.4	1139.9
137.5°	505.6	554.8	711.9	958.0	1067.3
140°	522.5	568.1	710.7	925.3	1023.9
142.5°	537.0	579.1	708.3	896.0	980.5
145°	558.6	596.9	704.7	858.3	924.5
147.5°	581.8	614.8	702.9	824.9	877.9
150°	596.3	625.7	701.7	806.5	847.7
152.5°	609.5	636.6	700.5	790.7	824.9
155°	632.4	653.0	700.2	771.4	793.5
157.5°	649.0	665.8	700.2	755.6	770.9
160°	661.0	674.3	700.2	747.1	758.9
162.5°	670.7	681.6	701.4	739.8	749.3
165°	683.6	692.4	703.2	731.9	736.3
167.5°	692.6	699.4	704.7	725.2	726.4
170°	698.7	703.1	704.7	722.8	722.8
172.5°	703.5	705.6	704.7	719.1	717.9
175°	707.7	709.2	704.7	713.7	712.2
177.5°	708.9	708.9	704.1	711.3	708.9
180°	707.7	707.7	707.7	707.7	707.7

(END OF REPORT)