

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: P521847

Luminaire Tested: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521847
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7282.7 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

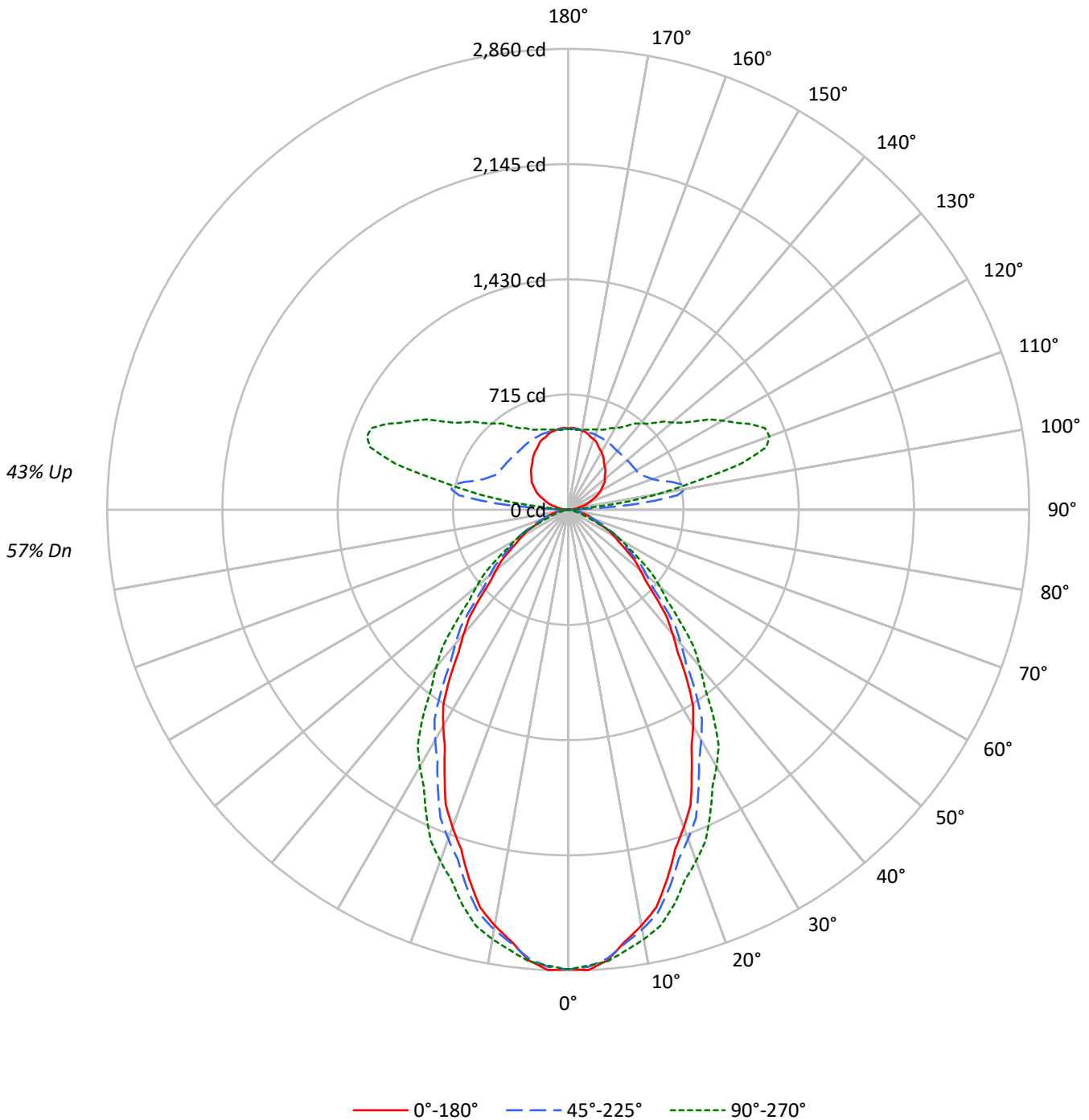
Input Watts (W): 79.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	109	109	109	101	101	101	101	87	87	87		74	74	74		63	63	63	57
1	101	97	93	90	94	90	87	85	78	76	74		67	66	65		57	56	55	51
2	93	86	81	76	86	81	76	72	70	67	64		61	58	56		52	50	49	45
3	86	77	70	65	80	72	66	62	63	59	55		55	52	49		47	45	43	39
4	79	69	62	56	74	65	59	54	57	52	48		50	46	43		43	41	38	35
5	73	62	55	49	68	59	52	47	52	47	43		46	42	39		40	37	34	32
6	68	57	49	44	63	54	47	42	48	42	38		42	38	35		37	34	31	28
7	63	52	44	39	59	49	42	37	44	38	34		39	34	31		34	31	28	26
8	59	47	40	35	55	45	38	34	40	35	31		36	32	28		32	28	26	24
9	55	44	37	32	52	41	35	31	37	32	28		33	29	26		29	26	24	22
10	52	40	34	29	49	38	32	28	35	29	26		31	27	24		28	24	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26319	26319	26319
5°	25990	25898	26048
10°	24555	24778	25352
15°	22668	23194	24234
20°	20585	21359	22773
25°	18463	19470	21216
30°	16509	17589	19602
35°	14436	15480	17693
40°	12151	13116	15316
45°	10027	10894	12788
50°	8372	9127	10653
55°	7107	7832	8799
60°	6075	6790	7021
65°	4836	5711	4536
70°	4289	4456	2768
75°	3971	3615	1697
80°	3655	3326	1461
85°	3313	3049	1196

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12788 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.7	3.6
10°-20°	680.6	9.3
20°-30°	881.5	12.1
30°-40°	863.2	11.9
40°-50°	660.8	9.1
50°-60°	440.3	6.0
60°-70°	240.3	3.3
70°-80°	100.1	1.4
80°-90°	28.3	0.4
90°-100°	229.3	3.1
100°-110°	652.5	9.0
110°-120°	625.2	8.6
120°-130°	494.8	6.8
130°-140°	397.1	5.5
140°-150°	310.9	4.3
150°-160°	227.5	3.1
160°-170°	140.9	1.9
170°-180°	47.8	0.7
0°-30°	1823.7	25.0
0°-40°	2687.0	36.9
0°-60°	3788.0	52.0
0°-90°	4156.8	57.1
90°-120°	1507.0	20.7
90°-150°	2709.8	37.2
90°-180°	3126.0	42.9
0°-180°	7282.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2853	2853	2853	2853	2853	
5°	2806	2778	2796	2803	2812	261
15°	2373	2365	2428	2494	2537	663
25°	1814	1819	1913	1996	2084	834
35°	1282	1288	1374	1467	1571	797
45°	768	783	835	898	980	599
55°	442	460	487	505	547	401
65°	222	240	262	229	208	230
75°	111	111	101	70	48	119
85°	31	31	29	19	11	34
90°	0	0	0	0	0	3
95°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2852.6	2852.6	2852.6	2852.6	2852.6
2.5°	2859.6	2834.1	2840.6	2840.4	2832.6
5°	2806.3	2778.1	2796.3	2802.7	2812.5
7.5°	2702.1	2680.8	2713.9	2738.4	2758.2
10°	2621.0	2602.7	2644.8	2680.4	2706.1
12.5°	2526.9	2511.5	2563.7	2611.5	2645.1
15°	2373.2	2364.6	2428.3	2494.3	2537.2
17.5°	2208.7	2204.6	2277.6	2354.7	2409.5
20°	2096.6	2095.4	2175.4	2255.7	2319.4
22.5°	1983.4	1986.1	2070.3	2153.8	2226.2
25°	1813.7	1818.6	1912.6	1995.9	2084.1
27.5°	1656.7	1658.9	1756.1	1844.1	1938.1
30°	1549.6	1555.7	1651.0	1742.1	1840.0
32.5°	1442.4	1449.5	1542.8	1637.0	1736.8
35°	1281.7	1287.8	1374.4	1466.8	1570.9
37.5°	1116.0	1124.3	1201.1	1288.6	1390.9
40°	1008.9	1021.1	1089.0	1171.4	1271.7
42.5°	905.7	920.9	983.8	1062.0	1152.6
45°	768.5	783.2	834.9	898.1	980.1
47.5°	650.4	667.3	707.0	761.4	831.4
50°	583.3	599.2	635.9	676.2	742.2
52.5°	524.2	540.1	572.8	603.8	660.1
55°	441.8	460.2	486.9	505.4	547.0
57.5°	374.3	391.9	413.1	421.4	446.6
60°	329.2	348.8	368.0	367.1	380.5
62.5°	288.1	304.8	323.9	310.7	311.4
65°	221.5	239.9	261.6	228.6	207.8
67.5°	179.0	182.9	205.3	159.4	134.7
70°	159.0	159.0	165.2	123.4	102.6
72.5°	139.9	139.9	134.2	100.4	78.6
75°	111.4	111.4	101.4	69.6	47.6
77.5°	85.9	84.9	77.6	51.9	34.5
80°	68.8	68.8	62.6	41.0	27.5
82.5°	53.8	53.8	48.6	32.0	20.5
85°	31.3	31.3	28.8	18.6	11.3
87.5°	11.0	11.0	10.0	6.0	5.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)