

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: P521594

Luminaire Tested: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521594
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10250.8 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

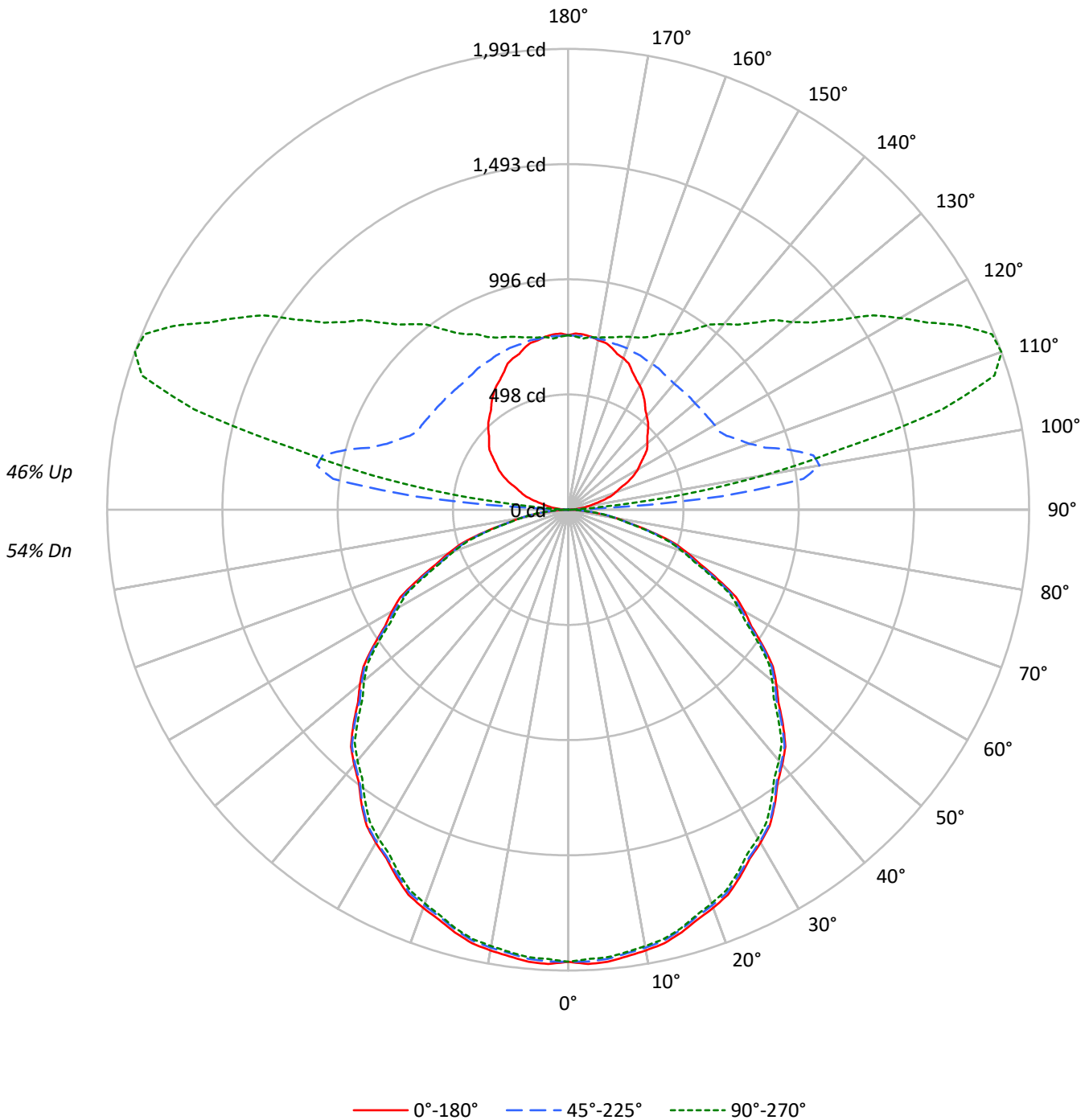
Input Watts (W): 87.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	72	72	72	60	60	60	54
1	99	94	90	87	91	87	84	81	75	72	70	63	62	60	53	52	50	45
2	90	82	76	70	83	76	71	66	65	61	58	56	52	50	46	44	42	38
3	82	72	64	58	75	67	60	55	58	53	48	49	45	42	41	38	36	32
4	75	64	55	49	69	59	52	47	51	45	41	43	39	36	36	33	31	27
5	68	57	48	42	63	53	45	40	46	40	35	39	34	31	33	29	27	23
6	63	51	42	36	58	47	40	35	41	35	31	35	30	27	30	26	23	20
7	58	46	38	32	54	43	35	30	37	31	27	32	27	24	27	23	21	18
8	54	41	34	28	50	39	32	27	34	28	24	29	25	21	25	21	18	16
9	50	38	30	25	47	35	29	24	31	25	21	27	22	19	23	19	17	14
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18016	18016	18016
5°	18164	18045	17976
10°	18113	18003	17932
15°	18057	17946	17894
20°	17973	17858	17773
25°	17839	17741	17622
30°	17699	17642	17459
35°	17518	17457	17239
40°	17313	17248	17042
45°	17120	17009	16743
50°	16851	16712	16512
55°	16541	16385	16127
60°	16227	15930	15653
65°	15596	15269	14965
70°	14823	14302	14130
75°	13403	13022	12790
80°	11041	11041	10871
85°	7823	8956	9411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17120 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	1.8
10°-20°	529.3	5.2
20°-30°	800.5	7.8
30°-40°	964.1	9.4
40°-50°	1001.0	9.8
50°-60°	907.5	8.9
60°-70°	692.3	6.8
70°-80°	387.2	3.8
80°-90°	100.7	1.0
90°-100°	343.6	3.4
100°-110°	977.6	9.5
110°-120°	936.6	9.1
120°-130°	741.3	7.2
130°-140°	595.0	5.8
140°-150°	465.8	4.5
150°-160°	340.8	3.3
160°-170°	211.1	2.1
170°-180°	71.6	0.7
0°-30°	1514.5	14.8
0°-40°	2478.7	24.2
0°-60°	4387.2	42.8
0°-90°	5567.3	54.3
90°-120°	2257.8	22.0
90°-150°	4059.9	39.6
90°-180°	4684.0	45.7
0°-180°	10250.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1953	1953	1953	1953	1953	
5°	1961	1941	1948	1943	1941	186
15°	1890	1872	1879	1877	1873	533
25°	1752	1735	1743	1730	1731	807
35°	1555	1543	1550	1533	1531	972
45°	1312	1305	1304	1287	1283	1011
55°	1028	1026	1019	1006	1003	919
65°	714	710	699	691	686	708
75°	376	370	365	360	359	397
85°	74	81	85	85	89	92
90°	0	0	0	0	0	4
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1952.7	1952.7	1952.7	1952.7	1952.7
2.5°	1964.7	1948.8	1953.5	1950.0	1943.2
5°	1961.2	1941.3	1948.4	1943.0	1940.9
7.5°	1946.2	1927.6	1933.6	1930.3	1927.8
10°	1933.4	1915.6	1921.6	1918.3	1914.1
12.5°	1918.8	1900.2	1907.0	1902.1	1900.4
15°	1890.5	1871.7	1878.8	1876.6	1873.4
17.5°	1856.3	1837.2	1844.5	1840.1	1837.6
20°	1830.6	1810.7	1818.8	1810.2	1810.2
22.5°	1801.4	1781.5	1791.4	1778.6	1781.1
25°	1752.4	1734.6	1742.7	1729.9	1731.0
27.5°	1699.0	1682.3	1692.8	1676.3	1675.7
30°	1661.3	1644.6	1656.0	1637.8	1638.8
32.5°	1619.3	1605.1	1614.8	1597.5	1596.8
35°	1555.3	1542.7	1549.9	1532.7	1530.6
37.5°	1485.4	1476.2	1479.2	1462.9	1462.1
40°	1437.5	1429.1	1432.1	1415.0	1415.0
42.5°	1388.6	1381.1	1383.3	1364.4	1364.4
45°	1312.1	1304.8	1303.6	1287.4	1283.2
47.5°	1230.5	1224.7	1220.9	1206.3	1204.4
50°	1174.0	1169.8	1164.3	1151.4	1150.4
52.5°	1114.8	1113.2	1106.9	1093.2	1092.1
55°	1028.3	1026.2	1018.6	1005.7	1002.6
57.5°	937.7	935.6	926.7	914.0	910.9
60°	879.4	873.1	863.3	851.5	848.3
62.5°	816.0	808.9	799.1	788.1	787.5
65°	714.4	710.3	699.4	690.8	685.5
67.5°	618.9	609.5	598.8	591.7	590.6
70°	549.5	540.1	530.2	524.8	523.8
72.5°	480.1	472.3	463.4	458.0	457.8
75°	376.0	369.7	365.3	359.9	358.8
77.5°	272.9	271.2	269.5	263.7	263.7
80°	207.8	207.8	207.8	204.6	204.6
82.5°	149.5	153.7	153.8	152.3	152.3
85°	73.9	81.2	84.6	84.7	88.9
87.5°	20.6	28.1	33.4	34.3	36.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)