

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: P521438

Luminaire Tested: SQ4-F-050U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521438
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-050U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 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: 7905.3 lumens
Efficiency: N/A
Efficacy: 111.2 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: Semi-Direct

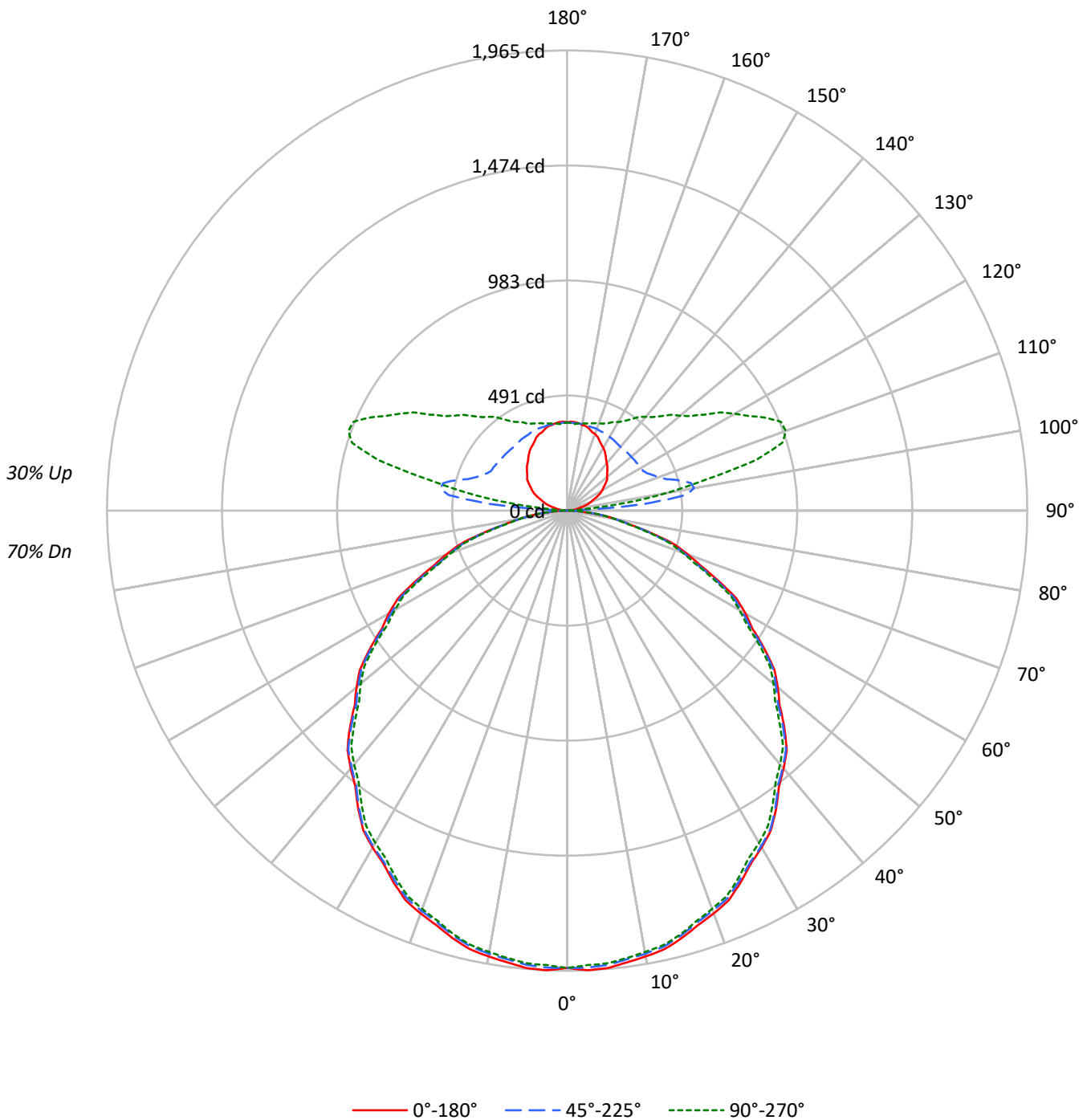
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	112	112	112	112	106	106	106	106	95	95	95		84	84	84		75	75	75	70
1	102	98	94	90	96	92	89	86	83	80	78		74	72	70		66	64	63	59
2	93	85	79	73	88	81	75	70	72	68	64		65	61	58		58	55	53	49
3	85	75	67	61	80	71	64	58	64	58	53		57	53	49		51	47	45	41
4	77	66	58	51	73	63	55	49	56	50	45		51	46	42		45	41	38	35
5	71	59	50	44	67	56	48	42	50	44	39		45	40	36		41	37	33	30
6	65	53	44	38	62	50	42	37	45	39	34		41	36	32		37	33	29	26
7	61	48	39	33	57	45	38	32	41	35	30		37	32	28		34	29	26	23
8	56	43	35	30	53	41	34	29	38	31	27		34	29	25		31	26	23	21
9	52	40	32	26	49	38	31	26	35	28	24		31	26	22		28	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22		29	24	20		26	22	19	17

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	2.3
10°-20°	529.3	6.7
20°-30°	800.5	10.1
30°-40°	964.1	12.2
40°-50°	1001.0	12.7
50°-60°	907.5	11.5
60°-70°	692.3	8.8
70°-80°	387.2	4.9
80°-90°	100.7	1.3
90°-100°	171.5	2.2
100°-110°	488.0	6.2
110°-120°	467.6	5.9
120°-130°	370.1	4.7
130°-140°	297.0	3.8
140°-150°	232.5	2.9
150°-160°	170.1	2.2
160°-170°	105.4	1.3
170°-180°	35.8	0.5
0°-30°	1514.5	19.2
0°-40°	2478.7	31.4
0°-60°	4387.2	55.5
0°-90°	5567.3	70.4
90°-120°	1127.1	14.3
90°-150°	2026.7	25.6
90°-180°	2338.0	29.6
0°-180°	7905.3	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°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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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°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)