

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: P521490

Luminaire Tested: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521490
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-075U-125D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 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: 9067.0 lumens
Efficiency: N/A
Efficacy: 114.9 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

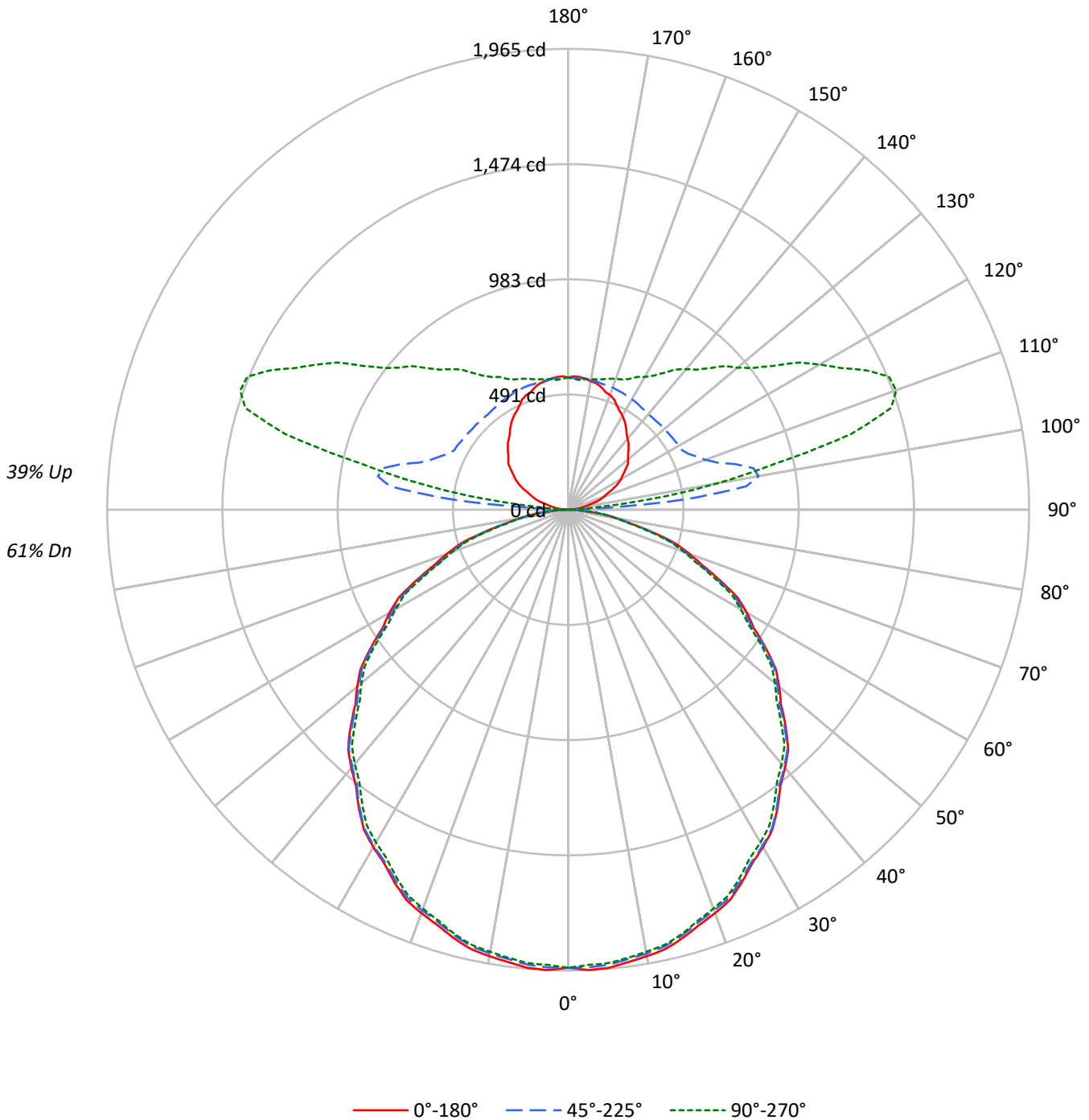
Input Watts (W): 78.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90		78	78	78		67	67	67	61
1	100	96	92	88	94	90	86	83	78	76	73		68	66	64		59	57	56	51
2	91	83	77	72	85	78	73	68	69	64	60		60	56	53		51	49	47	43
3	83	73	65	59	77	69	62	56	60	55	51		52	48	45		45	42	40	36
4	76	65	56	50	71	61	53	48	53	48	43		47	42	38		40	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37		42	37	33		36	32	29	26
6	64	52	43	37	60	49	41	35	43	37	32		38	33	29		33	29	26	23
7	59	47	38	33	55	44	36	31	39	33	28		34	29	26		30	26	23	20
8	55	42	34	29	51	40	33	28	36	29	25		31	26	23		27	23	20	18
9	51	39	31	26	48	37	29	25	33	27	23		29	24	20		25	21	18	16
10	48	35	28	23	45	34	27	22	30	24	20		27	22	18		23	20	17	15

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	2.0
10°-20°	529.3	5.8
20°-30°	800.5	8.8
30°-40°	964.1	10.6
40°-50°	1001.0	11.0
50°-60°	907.5	10.0
60°-70°	692.3	7.6
70°-80°	387.2	4.3
80°-90°	100.7	1.1
90°-100°	256.7	2.8
100°-110°	730.5	8.1
110°-120°	699.9	7.7
120°-130°	553.9	6.1
130°-140°	444.6	4.9
140°-150°	348.1	3.8
150°-160°	254.7	2.8
160°-170°	157.8	1.7
170°-180°	53.5	0.6
0°-30°	1514.5	16.7
0°-40°	2478.7	27.3
0°-60°	4387.2	48.4
0°-90°	5567.3	61.4
90°-120°	1687.1	18.6
90°-150°	3033.8	33.5
90°-180°	3500.0	38.6
0°-180°	9067.0	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°	28	111	497	172	106	32
105°	114	172	744	1315	1250	120
115°	211	255	564	1196	1404	208
125°	298	330	539	894	1069	267
135°	364	395	532	755	854	281
145°	430	452	537	654	712	268
155°	491	502	550	591	615	227
165°	542	544	556	568	576	152
175°	568	565	562	559	555	54
180°	563	563	563	563	563	

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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°	8.6	45.4	105.4	30.7	23.1
95°	27.8	110.6	497.0	172.0	106.0
97.5°	51.2	129.5	765.4	547.7	375.3
100°	67.5	140.8	823.7	834.3	642.7
102.5°	85.5	152.9	810.8	1068.0	900.6
105°	113.5	172.2	744.4	1314.9	1250.0
107.5°	142.0	194.6	666.9	1384.6	1442.4
110°	161.7	211.0	622.3	1357.9	1487.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.6	227.3	592.3	1294.9	1480.1
115°	211.0	255.0	564.5	1195.8	1404.3
117.5°	237.8	279.1	548.0	1087.5	1308.3
120°	259.2	293.8	546.3	1025.6	1237.2
122.5°	276.4	310.9	542.0	971.3	1167.7
125°	297.8	330.2	538.8	894.1	1069.0
127.5°	321.1	351.5	537.1	848.0	992.1
130°	333.1	363.5	534.5	815.8	941.5
132.5°	346.0	375.5	534.5	790.8	906.4
135°	364.2	394.6	532.4	755.2	853.7
137.5°	381.3	410.9	532.1	725.2	810.2
140°	394.2	424.5	531.3	700.2	781.9
142.5°	408.7	434.1	533.9	680.3	753.6
145°	429.5	451.5	536.6	653.7	712.3
147.5°	447.3	468.7	541.4	626.7	677.4
150°	462.7	477.4	543.1	617.8	653.4
152.5°	474.7	490.2	544.8	605.7	638.8
155°	490.6	502.1	549.5	590.7	614.8
157.5°	510.3	517.2	550.6	583.9	601.1
160°	520.6	525.8	554.8	578.7	593.4
162.5°	526.6	532.6	555.7	574.4	585.7
165°	542.0	544.1	555.9	567.9	576.3
167.5°	552.5	550.6	560.8	566.3	569.6
170°	555.9	554.9	559.1	560.3	564.5
172.5°	563.6	560.1	561.7	558.6	561.9
175°	567.7	564.6	562.3	559.0	554.8
177.5°	569.4	564.4	561.7	558.3	559.1
180°	563.4	563.4	563.4	563.4	563.4

(END OF REPORT)