

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

(formerly Eaton)

Brand: CORELITE

Report Number: P520265

Luminaire Tested: **SQ4-F-100U-125D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520265
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

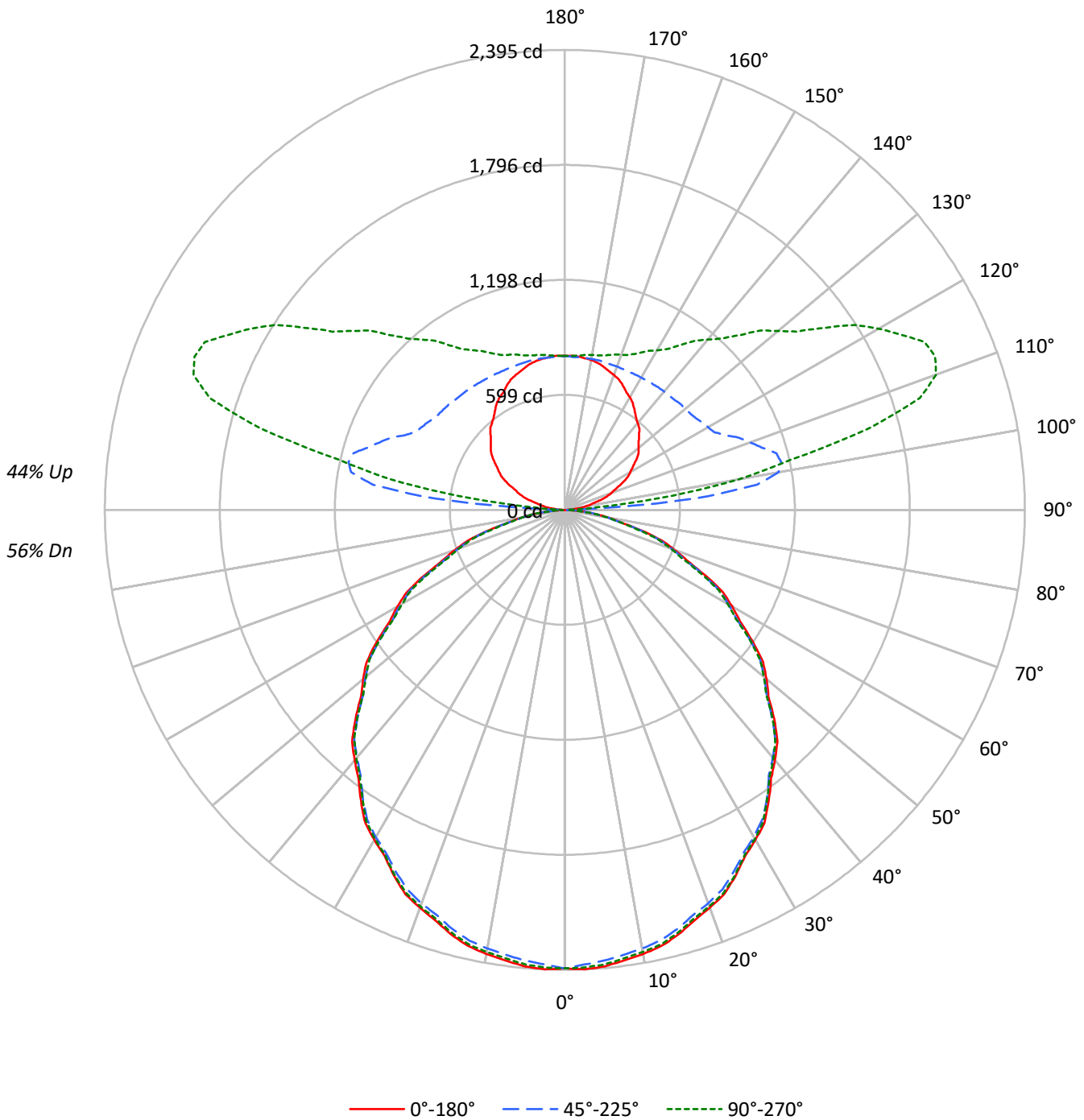
Lumens per Lamp: N/A
Luminaire Lumens: 11724.8 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 104
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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47				
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39				
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21				
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14687	14687	14687
5°	14736	14549	14671
10°	14668	14487	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14119	14236
30°	14095	13973	14048
35°	13895	13776	13786
40°	13666	13518	13560
45°	13411	13261	13284
50°	13117	12966	12928
55°	12783	12600	12571
60°	12368	12092	12029
65°	11725	11476	11324
70°	10920	10636	10494
75°	9715	9494	9214
80°	7913	7683	7637
85°	4728	5378	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.3	1.9
10°-20°	641.7	5.5
20°-30°	964.1	8.2
30°-40°	1150.4	9.8
40°-50°	1179.1	10.1
50°-60°	1051.0	9.0
60°-70°	782.4	6.7
70°-80°	423.9	3.6
80°-90°	99.0	0.8
90°-100°	375.4	3.2
100°-110°	1036.3	8.8
110°-120°	1068.7	9.1
120°-130°	858.8	7.3
130°-140°	674.9	5.8
140°-150°	517.6	4.4
150°-160°	372.0	3.2
160°-170°	227.5	1.9
170°-180°	76.7	0.7
0°-30°	1831.1	15.6
0°-40°	2981.5	25.4
0°-60°	5211.6	44.4
0°-90°	6516.8	55.6
90°-120°	2480.4	21.2
90°-150°	4531.8	38.7
90°-180°	5208.0	44.4
0°-180°	11724.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2388	2388	2388	2388	2388	
5°	2387	2383	2356	2377	2376	226
15°	2288	2283	2260	2280	2279	645
25°	2103	2099	2080	2092	2098	968
35°	1850	1849	1835	1835	1836	1157
45°	1542	1538	1524	1522	1527	1188
55°	1192	1188	1175	1166	1172	1065
65°	806	800	788	783	778	798
75°	409	409	400	392	388	434
85°	67	76	76	78	76	93
90°	3	5	10	12	13	6
95°	55	203	681	280	182	59
105°	185	285	1140	1740	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1408	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2387.9	2387.9	2387.9	2387.9	2387.9
2.5°	2395.3	2391.2	2370.1	2387.9	2384.8
5°	2386.6	2382.8	2356.4	2377.4	2376.2
7.5°	2366.5	2361.6	2337.5	2357.1	2354.9
10°	2348.5	2344.7	2319.6	2339.3	2338.1
12.5°	2326.5	2322.7	2297.5	2317.3	2317.0
15°	2288.1	2282.9	2260.5	2280.2	2278.9
17.5°	2242.1	2236.2	2214.0	2229.5	2232.1
20°	2205.3	2201.5	2180.4	2194.9	2197.4
22.5°	2167.5	2162.5	2140.3	2157.0	2159.6
25°	2102.8	2098.9	2080.4	2092.4	2097.6
27.5°	2031.8	2031.8	2014.8	2023.2	2026.3
30°	1984.5	1984.5	1967.4	1972.8	1978.0
32.5°	1934.1	1929.9	1913.8	1918.1	1923.3
35°	1850.5	1849.2	1834.7	1834.8	1836.0
37.5°	1764.0	1760.4	1744.6	1745.7	1751.9
40°	1702.0	1699.4	1683.6	1683.7	1688.8
42.5°	1638.9	1636.3	1622.5	1620.5	1622.5
45°	1541.7	1537.7	1524.5	1522.0	1527.2
47.5°	1438.1	1439.1	1423.3	1419.7	1422.6
50°	1370.8	1370.8	1355.0	1347.2	1351.0
52.5°	1300.3	1298.2	1282.4	1273.7	1282.7
55°	1192.0	1188.1	1175.0	1165.8	1172.3
57.5°	1081.1	1075.1	1061.9	1052.0	1055.6
60°	1005.4	996.4	983.0	975.2	977.8
62.5°	926.6	921.7	907.4	895.4	901.0
65°	805.6	800.5	788.5	783.1	778.1
67.5°	687.1	683.7	670.2	664.7	661.3
70°	607.2	600.7	591.4	584.8	583.5
72.5°	529.4	522.0	512.5	507.0	503.6
75°	408.8	408.8	399.5	391.5	387.7
77.5°	293.8	294.9	287.3	284.6	282.9
80°	223.4	223.4	216.9	214.3	215.6
82.5°	156.2	159.2	156.9	153.2	151.4
85°	67.0	76.0	76.2	77.5	76.2
87.5°	12.1	19.8	22.1	20.2	18.4
90°	2.6	5.0	10.3	11.6	12.9
92.5°	23.0	95.9	171.3	62.5	48.8
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.6	562.5
100°	118.0	242.2	1129.9	1137.8	924.6
102.5°	143.6	258.8	1153.4	1405.9	1203.8
105°	184.7	285.0	1140.1	1740.5	1639.0
107.5°	228.3	317.5	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.9
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.0	876.9	1689.1	1973.0
120°	395.0	462.8	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.5	1653.1
127.5°	483.2	545.9	823.6	1314.0	1524.9
130°	502.7	565.4	819.5	1256.0	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.3	1140.9	1286.3
137.5°	574.5	628.3	806.2	1085.0	1209.1
140°	590.0	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.5	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.0	796.1	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.2
152.5°	691.5	720.8	794.1	894.3	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.9	854.8	873.6
160°	747.7	764.0	793.8	845.5	859.2
162.5°	757.9	772.3	794.8	837.2	848.0
165°	773.4	783.4	796.4	827.4	833.6
167.5°	785.1	791.2	797.7	821.3	823.3
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.6	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.6	801.6	801.6	801.6	801.6

(END OF REPORT)