

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: P519977

Luminaire Tested: **SQ4-F-050U-125D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519977
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

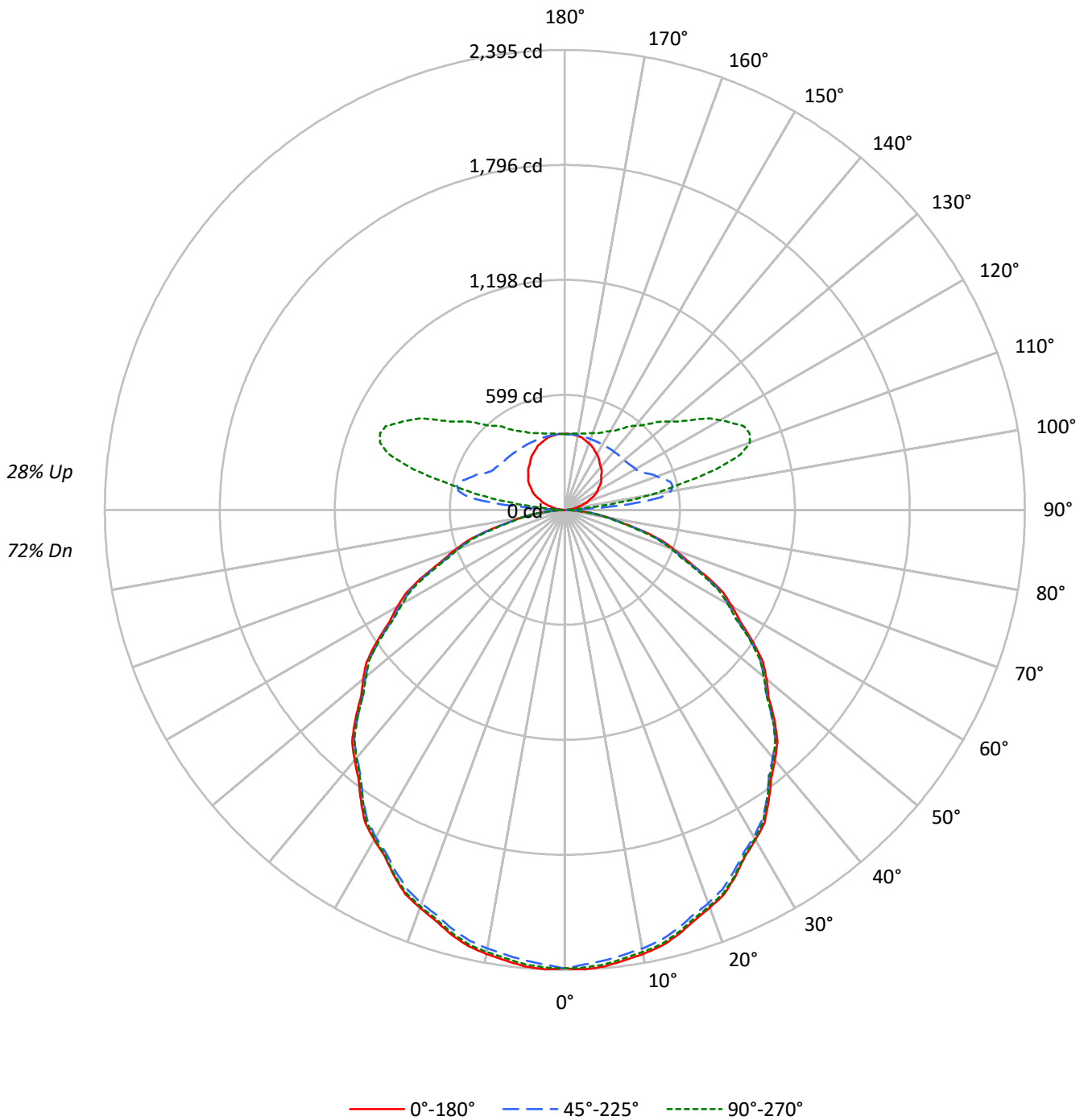
Lumens per Lamp: N/A
Luminaire Lumens: 9099.6 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 83.8
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	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

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	2.5
10°-20°	641.7	7.1
20°-30°	964.1	10.6
30°-40°	1150.4	12.6
40°-50°	1179.1	13.0
50°-60°	1051.0	11.5
60°-70°	782.4	8.6
70°-80°	423.9	4.7
80°-90°	98.8	1.1
90°-100°	189.9	2.1
100°-110°	515.9	5.7
110°-120°	530.4	5.8
120°-130°	424.1	4.7
130°-140°	333.2	3.7
140°-150°	255.5	2.8
150°-160°	183.7	2.0
160°-170°	112.4	1.2
170°-180°	37.9	0.4
0°-30°	1831.1	20.1
0°-40°	2981.5	32.8
0°-60°	5211.6	57.3
0°-90°	6516.6	71.6
90°-120°	1236.2	13.6
90°-150°	2249.0	24.7
90°-180°	2583.0	28.4
0°-180°	9099.6	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°	1	5	9	12	12	4
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	904	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	

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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°	11.9	19.8	21.8	20.2	18.1
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.0	90.3	38.8	32.8
95°	28.0	103.8	330.7	144.0	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	122.0	561.0	568.7	459.2
102.5°	70.8	129.1	575.2	703.3	606.7
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.3	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.6	949.5	1041.2
115°	162.8	197.6	454.1	903.5	1029.1
117.5°	182.6	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	935.0
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.8	254.9	410.9	692.3	816.6
127.5°	238.8	269.8	406.5	648.1	754.8
130°	248.1	277.9	404.5	620.4	716.1
132.5°	257.2	287.0	402.4	596.7	681.5
135°	269.7	299.5	399.4	563.8	636.0
137.5°	283.2	310.3	397.9	534.9	595.5
140°	291.2	317.4	396.8	516.5	571.1
142.5°	299.4	323.5	395.9	501.9	547.8
145°	311.7	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.0	461.1	489.5
150°	334.5	350.7	393.0	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	459.9
155°	352.4	364.7	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	374.9	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.0	409.6	410.9
167.5°	388.5	390.9	394.3	405.3	406.3
170°	390.6	393.0	394.3	403.2	403.2
172.5°	392.5	394.1	394.3	401.1	401.1
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)