

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: P564309

Luminaire Tested: **SQ4-PR1-100U-125D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564309  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-100U-125D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

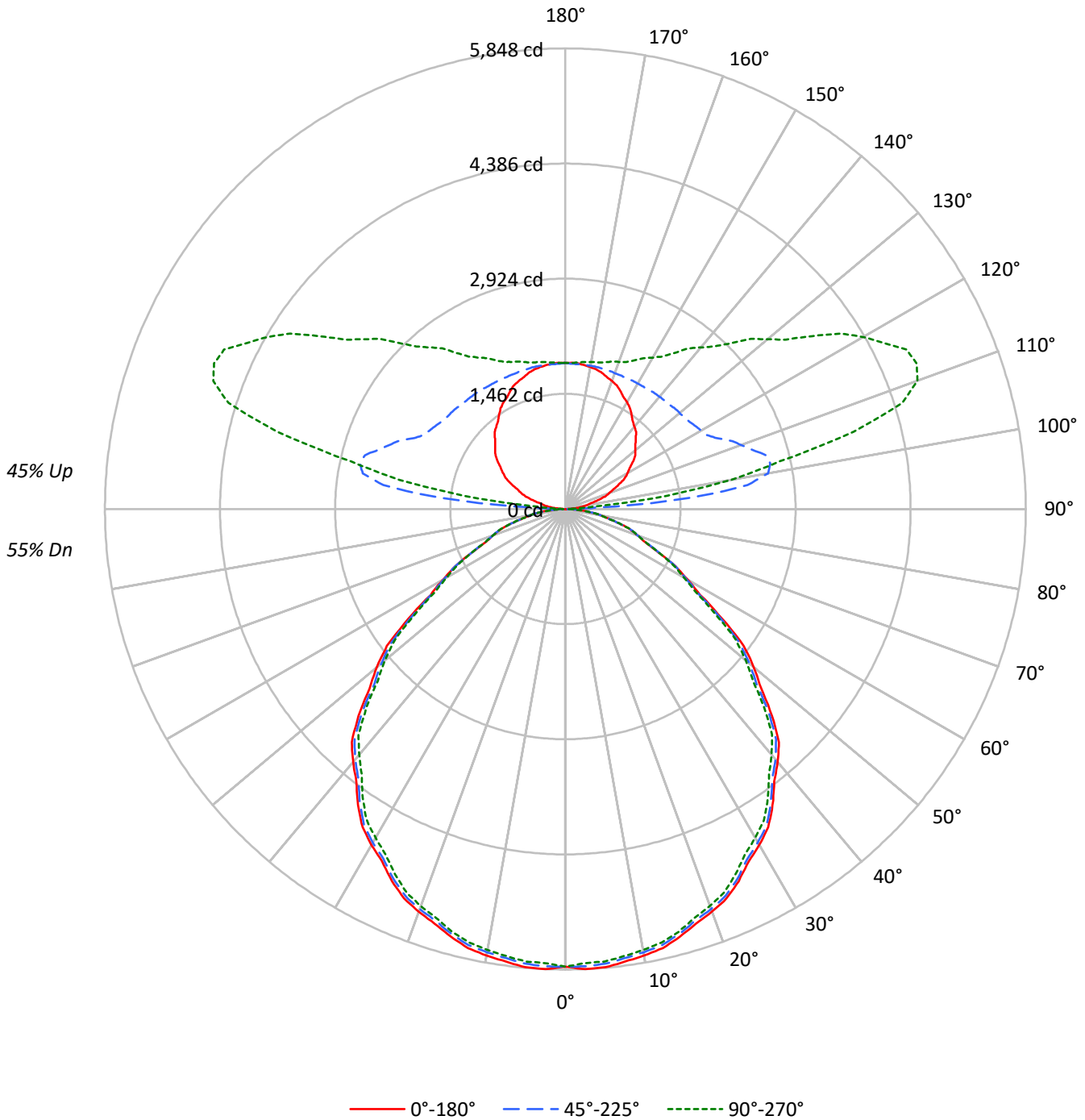
Lumens per Lamp: N/A  
Luminaire Lumens: 26581.2 lumens  
Efficiency: N/A  
Efficacy: 123.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 214.8  
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	52	47
2	91	83	77	72	84	78	72	68	67	63	60	57	54	52	48	46	44	40
3	83	73	66	60	77	69	62	57	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	61	54	49	53	47	43	45	41	38	38	35	33	29
5	70	58	50	44	65	54	47	42	47	42	37	41	36	33	35	31	29	26
6	64	52	44	38	60	49	42	37	43	37	33	37	32	29	31	28	25	23
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23	20
8	55	43	35	30	51	40	33	29	35	30	26	31	26	23	26	23	20	18
9	51	39	32	27	48	37	30	26	33	27	23	28	24	21	24	21	18	16
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17873	17873	17873
5°	18034	17895	17802
10°	17977	17852	17758
15°	17898	17786	17691
20°	17808	17693	17562
25°	17683	17564	17360
30°	17492	17367	17118
35°	17233	17083	16839
40°	16841	16660	16358
45°	16154	15871	15545
50°	14945	14585	14298
55°	13044	12749	12481
60°	10991	10899	10684
65°	9507	9544	9471
70°	8732	8777	8777
75°	8387	8387	8446
80°	7890	7979	7890
85°	6359	7064	7064



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	549.6	2.1
10°-20°	1572.4	5.9
20°-30°	2371.7	8.9
30°-40°	2825.8	10.6
40°-50°	2786.0	10.5
50°-60°	2129.2	8.0
60°-70°	1317.6	5.0
70°-80°	748.4	2.8
80°-90°	231.5	0.9
90°-100°	868.4	3.3
100°-110°	2397.4	9.0
110°-120°	2472.6	9.3
120°-130°	1986.9	7.5
130°-140°	1561.5	5.9
140°-150°	1197.6	4.5
150°-160°	860.7	3.2
160°-170°	526.4	2.0
170°-180°	177.5	0.7
0°-30°	4493.6	16.9
0°-40°	7319.5	27.5
0°-60°	12234.8	46.0
0°-90°	14532.3	54.7
90°-120°	5738.4	21.6
90°-150°	10484.4	39.4
90°-180°	12049.0	45.3
0°-180°	26581.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5812	5812	5812	5812	5812	
5°	5842	5778	5797	5776	5767	554
15°	5621	5563	5586	5566	5556	1586
25°	5211	5147	5176	5121	5116	2398
35°	4590	4536	4550	4490	4485	2865
45°	3714	3665	3649	3584	3574	2845
55°	2433	2394	2378	2338	2328	2180
65°	1306	1297	1312	1302	1302	1323
75°	706	706	706	711	711	745
85°	180	190	200	200	200	210
90°	6	12	24	27	30	16
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	



TEST NUMBER: P564309

CATALOG NUMBER: SQ4-PR1-100U-125D-835-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5811.6	5811.6	5811.6	5811.6	5811.6
2.5°	5847.7	5796.8	5811.6	5799.0	5771.6
5°	5841.7	5778.1	5796.6	5776.4	5766.6
7.5°	5796.6	5734.0	5752.6	5732.4	5726.5
10°	5756.6	5697.8	5716.5	5696.3	5686.5
12.5°	5712.5	5649.9	5672.5	5648.2	5638.4
15°	5621.4	5562.7	5586.4	5566.1	5556.4
17.5°	5521.3	5458.7	5482.3	5459.0	5446.2
20°	5441.2	5382.5	5406.2	5371.0	5366.1
22.5°	5353.1	5294.4	5318.1	5271.0	5270.0
25°	5211.0	5147.3	5175.9	5120.7	5115.8
27.5°	5041.8	4983.0	5006.7	4950.5	4944.7
30°	4925.6	4866.9	4890.6	4830.3	4820.5
32.5°	4793.5	4738.7	4758.4	4698.2	4692.4
35°	4590.2	4536.4	4550.2	4490.0	4485.1
37.5°	4359.0	4310.0	4317.9	4251.8	4246.9
40°	4194.8	4145.9	4149.7	4079.6	4074.7
42.5°	4014.6	3965.6	3961.5	3891.3	3886.4
45°	3714.2	3665.3	3649.2	3583.9	3574.1
47.5°	3371.9	3322.9	3292.8	3239.5	3232.7
50°	3123.6	3074.6	3048.5	3003.1	2988.4
52.5°	2855.3	2806.3	2784.2	2742.8	2728.1
55°	2432.8	2393.6	2377.7	2337.5	2327.7
57.5°	2031.3	2004.9	2000.3	1961.2	1957.2
60°	1787.0	1772.4	1772.0	1737.0	1737.0
62.5°	1578.8	1568.0	1575.8	1552.7	1548.8
65°	1306.5	1296.7	1311.5	1301.5	1301.5
67.5°	1091.2	1091.2	1100.3	1096.3	1096.3
70°	971.1	971.1	976.1	976.1	976.1
72.5°	863.0	859.1	872.0	871.9	868.0
75°	705.8	705.8	705.8	710.8	710.8
77.5°	549.6	550.6	554.6	553.5	549.6
80°	445.5	450.4	450.5	445.5	445.5
82.5°	341.4	346.3	346.4	345.3	341.4
85°	180.2	190.0	200.2	200.2	200.2
87.5°	53.2	70.1	84.8	85.4	82.0
90°	5.9	11.7	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.7	112.7
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.3	2333.9	1796.9	1301.3
100°	273.0	560.2	2614.0	2632.4	2139.2
102.5°	332.3	598.6	2668.6	3252.5	2784.9
105°	427.3	659.3	2637.7	4026.9	3791.9
107.5°	528.1	734.7	2490.5	4400.3	4486.2
110°	599.3	785.0	2376.6	4480.6	4759.1

TEST NUMBER: P564309

CATALOG NUMBER: SQ4-PR1-100U-125D-835-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	663.4	842.1	2269.8	4417.2	4828.0
115°	765.5	925.1	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.5
120°	913.9	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.7	4144.4
125°	1050.3	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.8	1343.9	1886.4	2793.4	3195.5
135°	1264.0	1400.3	1872.2	2639.4	2975.9
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.3
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.3	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.4
152.5°	1599.8	1667.7	1837.2	2068.9	2157.6
155°	1652.6	1707.8	1833.6	2016.1	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.8	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.1	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.7	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.4	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.2	1856.8	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)