

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: P562969

Luminaire Tested: **SQ4-PC3-100U-125D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562969  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-100U-125D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27077.1 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

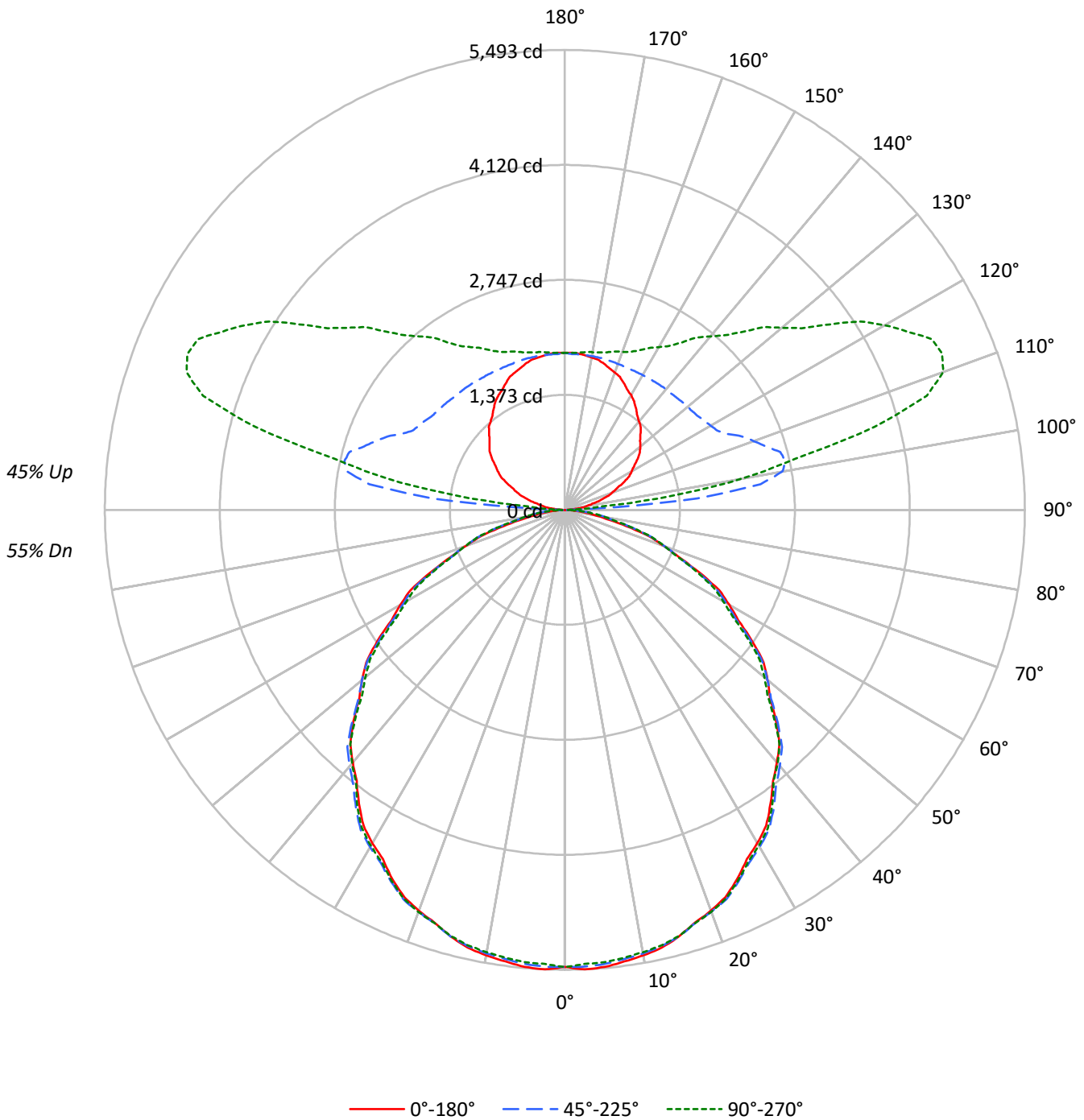
Input Watts (W): 214.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55				
1	99	95	91	87	92	88	85	82	76	73	71	64	63	61	54	53	51	47				
2	90	83	76	71	83	77	72	67	66	62	59	56	54	51	47	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	70	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	54	46	41	46	41	36	40	35	32	34	30	28	24				
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24	21				
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22	19				
8	55	42	34	29	51	39	32	27	35	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	25	32	26	22	28	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°	16794	16794	16794
5°	16920	16811	16748
10°	16879	16800	16752
15°	16790	16790	16774
20°	16680	16729	16729
25°	16522	16642	16591
30°	16321	16519	16447
35°	16078	16325	16211
40°	15813	16036	15874
45°	15525	15635	15393
50°	15119	15119	14877
55°	14639	14450	14233
60°	13932	13652	13435
65°	12877	12620	12510
70°	11275	11366	11321
75°	9072	10034	10093
80°	6447	8506	8597
85°	3924	7135	7135



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	516.8	1.9
10°-20°	1483.0	5.5
20°-30°	2245.9	8.3
30°-40°	2692.5	9.9
40°-50°	2745.4	10.1
50°-60°	2396.6	8.9
60°-70°	1715.7	6.3
70°-80°	883.7	3.3
80°-90°	227.3	0.8
90°-100°	877.2	3.2
100°-110°	2421.6	8.9
110°-120°	2497.4	9.2
120°-130°	2006.9	7.4
130°-140°	1577.2	5.8
140°-150°	1209.7	4.5
150°-160°	869.4	3.2
160°-170°	531.7	2.0
170°-180°	179.2	0.7
0°-30°	4245.7	15.7
0°-40°	6938.1	25.6
0°-60°	12080.1	44.6
0°-90°	14906.9	55.1
90°-120°	5796.2	21.4
90°-150°	10589.9	39.1
90°-180°	12170.0	44.9
0°-180°	27077.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5461	5461	5461	5461	5461	
5°	5481	5426	5445	5430	5425	520
15°	5274	5229	5274	5273	5268	1487
25°	4869	4834	4904	4889	4889	2241
35°	4282	4273	4348	4318	4318	2678
45°	3570	3560	3595	3549	3539	2748
55°	2730	2696	2695	2654	2654	2434
65°	1770	1730	1734	1719	1719	1750
75°	764	798	844	849	849	825
85°	111	171	202	207	202	151
90°	6	12	24	27	30	14
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5460.6	5460.6	5460.6	5460.6	5460.6
2.5°	5493.0	5445.5	5460.6	5448.0	5428.2
5°	5480.8	5426.4	5445.4	5430.1	5425.2
7.5°	5441.4	5387.0	5412.1	5401.8	5396.9
10°	5405.0	5350.6	5379.7	5369.5	5364.5
12.5°	5356.4	5306.0	5339.2	5329.1	5328.1
15°	5273.5	5229.0	5273.5	5273.4	5268.5
17.5°	5169.4	5128.8	5176.4	5179.4	5176.4
20°	5096.6	5052.1	5111.7	5106.8	5111.7
22.5°	5007.6	4971.0	5034.9	5021.8	5026.8
25°	4869.0	4834.4	4904.4	4889.3	4889.3
27.5°	4705.2	4680.5	4756.8	4740.6	4740.6
30°	4596.0	4571.3	4651.6	4631.4	4631.4
32.5°	4474.7	4457.8	4534.3	4510.0	4510.0
35°	4282.5	4272.6	4348.3	4317.9	4317.9
37.5°	4084.3	4075.4	4144.0	4107.3	4095.4
40°	3938.7	3933.8	3994.3	3953.9	3953.9
42.5°	3793.1	3788.1	3840.6	3792.1	3792.1
45°	3569.6	3559.7	3594.9	3549.2	3539.3
47.5°	3325.9	3316.0	3338.0	3288.4	3283.4
50°	3160.1	3150.2	3160.1	3114.4	3109.5
52.5°	2990.2	2972.4	2974.0	2928.5	2927.5
55°	2730.3	2695.7	2694.9	2654.5	2654.5
57.5°	2455.2	2409.8	2413.8	2379.3	2374.3
60°	2265.1	2215.7	2219.6	2189.2	2184.2
62.5°	2079.1	2021.7	2033.6	1999.2	1998.2
65°	1769.6	1730.1	1734.2	1719.1	1719.1
67.5°	1472.3	1435.8	1462.2	1450.1	1449.1
70°	1253.9	1229.2	1264.0	1263.9	1259.0
72.5°	1051.7	1050.7	1094.1	1094.2	1097.2
75°	763.5	798.1	844.4	849.4	849.4
77.5°	509.7	571.0	621.9	623.9	622.9
80°	364.0	433.3	480.3	490.3	485.4
82.5°	246.7	319.9	359.0	369.0	364.0
85°	111.2	170.6	202.2	207.2	202.2
87.5°	33.6	70.3	85.7	86.1	78.8
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)