

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: P562649

Luminaire Tested: **SQ4-PC3-050U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562649  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PC3-050U-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16557.0 lumens  
Efficiency: N/A  
Efficacy: 123.2 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: Semi-Direct

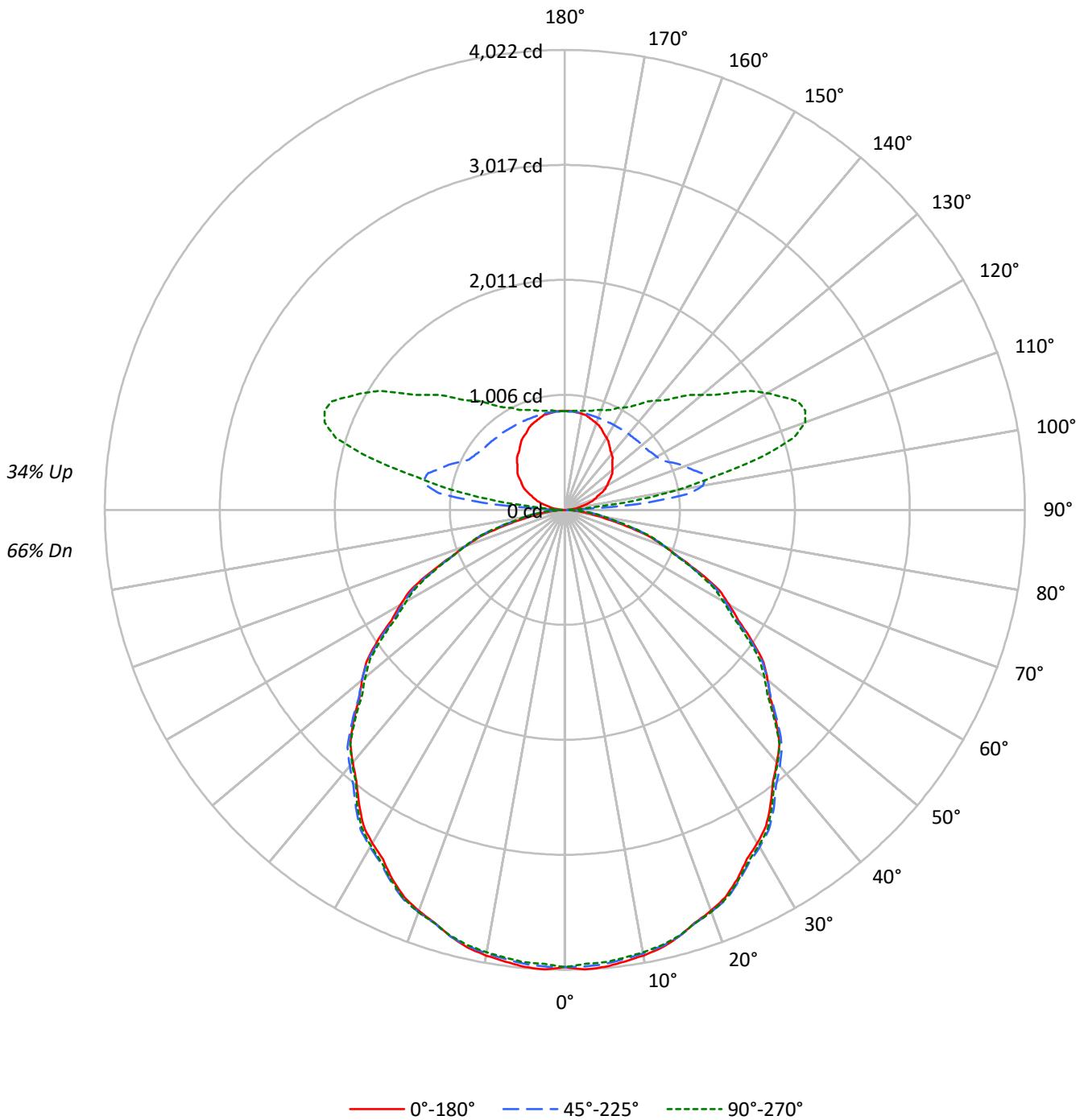
Input Watts (W): 134.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66				
1	101	97	93	90	95	91	88	85	81	78	76	72	70	68	63	61	60	56				
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	55	53	51	47				
3	84	75	67	61	79	70	64	58	63	57	53	56	51	48	49	46	43	39				
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	44	40	37	34				
5	71	59	50	44	66	56	48	42	50	44	39	44	39	36	39	35	32	29				
6	65	53	44	38	61	50	43	37	45	39	34	40	35	31	36	32	28	26				
7	60	48	40	34	57	45	38	33	41	35	30	37	31	28	32	28	25	23				
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20				
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20	18				
10	49	36	29	24	46	35	28	23	32	26	22	28	23	20	26	21	18	17				

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

	0°	45°	90°
0°	12298	12298	12298
5°	12390	12310	12265
10°	12360	12302	12267
15°	12295	12295	12283
20°	12214	12251	12251
25°	12099	12187	12149
30°	11952	12096	12044
35°	11774	11954	11871
40°	11579	11743	11624
45°	11369	11449	11272
50°	11072	11072	10894
55°	10720	10581	10422
60°	10202	9998	9838
65°	9430	9242	9160
70°	8256	8323	8290
75°	6643	7347	7391
80°	4722	6229	6294
85°	2876	5226	5226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	378.4	2.3
10°-20°	1086.0	6.6
20°-30°	1644.6	9.9
30°-40°	1971.7	11.9
40°-50°	2010.4	12.1
50°-60°	1755.0	10.6
60°-70°	1256.4	7.6
70°-80°	647.1	3.9
80°-90°	167.0	1.0
90°-100°	414.7	2.5
100°-110°	1126.6	6.8
110°-120°	1158.3	7.0
120°-130°	926.1	5.6
130°-140°	727.6	4.4
140°-150°	557.9	3.4
150°-160°	401.2	2.4
160°-170°	245.4	1.5
170°-180°	82.7	0.5
0°-30°	3109.0	18.8
0°-40°	5080.7	30.7
0°-60°	8846.0	53.4
0°-90°	10916.5	65.9
90°-120°	2699.5	16.3
90°-150°	4911.2	29.7
90°-180°	5640.0	34.1
0°-180°	16557.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3999	3999	3999	3999	3999	
5°	4014	3974	3988	3976	3973	381
15°	3862	3829	3862	3862	3858	1089
25°	3566	3540	3591	3580	3580	1641
35°	3136	3129	3184	3162	3162	1961
45°	2614	2607	2632	2599	2592	2012
55°	1999	1974	1973	1944	1944	1782
65°	1296	1267	1270	1259	1259	1282
75°	559	584	618	622	622	604
85°	82	125	148	152	148	111
90°	3	11	19	25	25	8
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3998.7	3998.7	3998.7	3998.7	3998.7
2.5°	4022.4	3987.6	3998.7	3989.5	3975.0
5°	4013.5	3973.7	3987.6	3976.4	3972.8
7.5°	3984.6	3944.8	3963.1	3955.7	3952.0
10°	3958.0	3918.1	3939.5	3932.0	3928.3
12.5°	3922.4	3885.5	3909.8	3902.4	3901.7
15°	3861.7	3829.1	3861.7	3861.6	3858.0
17.5°	3785.4	3755.7	3790.6	3792.8	3790.6
20°	3732.1	3699.5	3743.2	3739.6	3743.2
22.5°	3666.9	3640.2	3686.9	3677.4	3681.0
25°	3565.5	3540.2	3591.4	3580.3	3580.3
27.5°	3445.5	3427.4	3483.3	3471.5	3471.5
30°	3365.6	3347.5	3406.3	3391.5	3391.5
32.5°	3276.7	3264.4	3320.4	3302.6	3302.6
35°	3136.0	3128.8	3184.1	3161.9	3161.9
37.5°	2990.9	2984.4	3034.6	3007.7	2999.0
40°	2884.2	2880.6	2925.0	2895.3	2895.3
42.5°	2777.6	2774.0	2812.4	2776.9	2776.9
45°	2614.0	2606.7	2632.5	2599.0	2591.7
47.5°	2435.5	2428.3	2444.4	2408.0	2404.4
50°	2314.1	2306.8	2314.1	2280.7	2277.0
52.5°	2189.7	2176.6	2177.8	2144.5	2143.7
55°	1999.3	1974.0	1973.4	1943.8	1943.8
57.5°	1797.9	1764.6	1767.6	1742.3	1738.7
60°	1658.7	1622.5	1625.4	1603.1	1599.5
62.5°	1522.5	1480.5	1489.1	1463.9	1463.2
65°	1295.9	1266.9	1270.0	1258.8	1258.8
67.5°	1078.2	1051.4	1070.8	1061.9	1061.1
70°	918.2	900.1	925.6	925.5	921.9
72.5°	770.1	769.4	801.2	801.3	803.4
75°	559.1	584.4	618.3	622.0	622.0
77.5°	373.2	418.1	455.4	456.9	456.1
80°	266.6	317.3	351.7	359.1	355.4
82.5°	180.7	234.3	262.9	270.2	266.6
85°	81.5	124.9	148.1	151.7	148.1
87.5°	24.3	51.9	63.1	64.1	58.3
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)