

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: P564017

Luminaire Tested: **SQ4-PR1-050U-125D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564017
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PR1-050U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

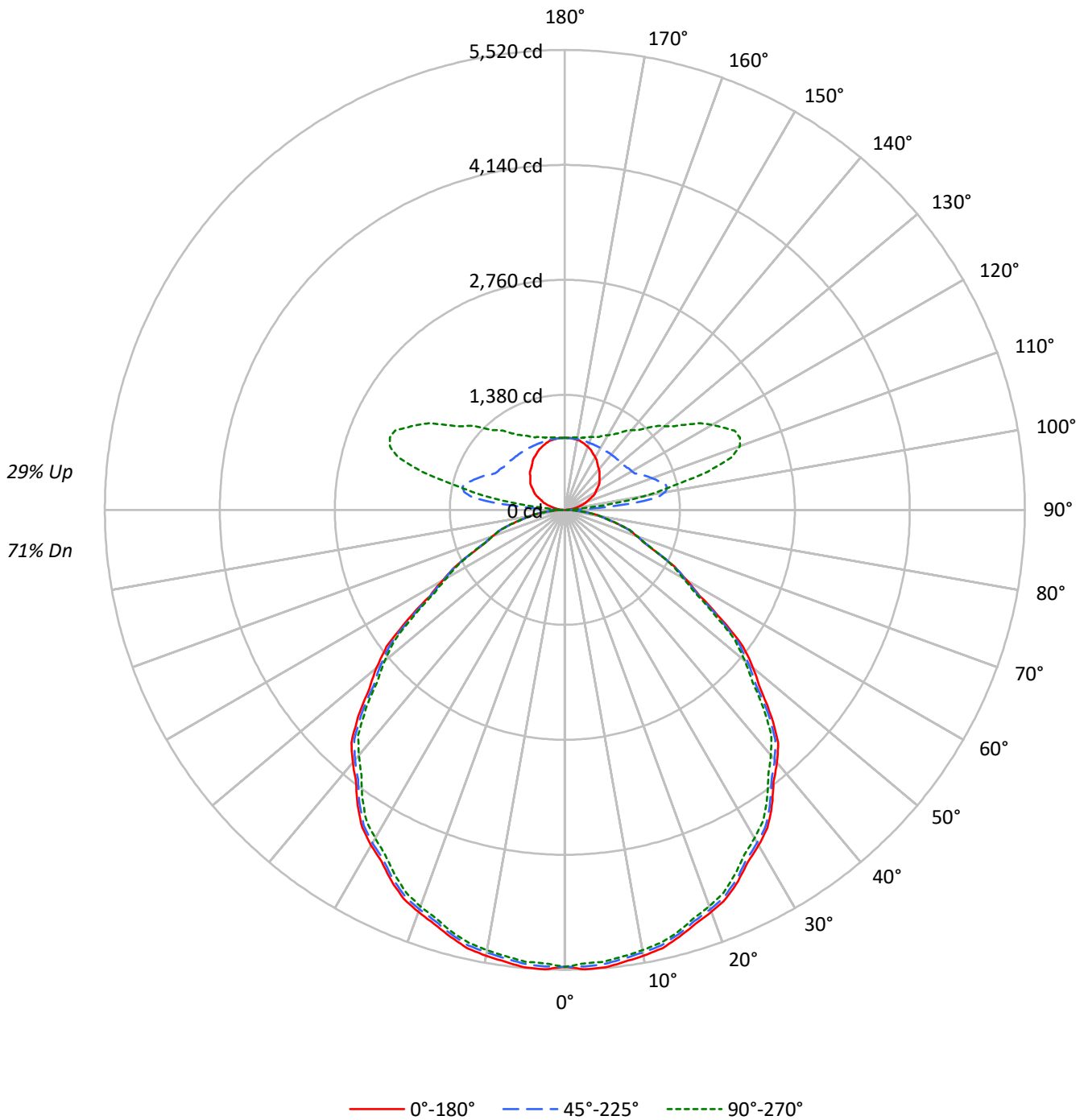
Lumens per Lamp: N/A
Luminaire Lumens: 19357.1 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	64	64	64	60	
2	94	87	80	75	89	82	77	72	74	70	66	67	63	60	60	57	55	55	55	55	51	
3	86	77	69	63	81	73	66	61	66	60	56	59	55	52	53	50	47	47	47	47	44	
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	41	38	
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	36	33	
6	67	55	47	41	63	52	45	39	48	41	37	43	38	34	39	35	32	32	32	32	29	
7	62	50	42	36	59	48	40	35	43	37	33	40	34	30	36	32	28	28	28	28	26	
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	25	25	25	25	23	
9	54	41	34	29	51	40	33	28	37	30	26	33	28	25	31	26	23	23	23	23	21	
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	21	21	21	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16870	16870	16870
5°	17022	16891	16803
10°	16968	16850	16762
15°	16894	16788	16698
20°	16809	16701	16577
25°	16690	16578	16386
30°	16510	16393	16158
35°	16267	16125	15894
40°	15896	15725	15440
45°	15248	14981	14673
50°	14106	13767	13496
55°	12312	12033	11780
60°	10375	10288	10084
65°	8974	9008	8940
70°	8242	8284	8284
75°	7916	7916	7972
80°	7447	7531	7447
85°	6002	6669	6669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	518.7	2.7
10°-20°	1484.2	7.7
20°-30°	2238.6	11.6
30°-40°	2667.3	13.8
40°-50°	2629.7	13.6
50°-60°	2009.8	10.4
60°-70°	1243.7	6.4
70°-80°	706.4	3.6
80°-90°	218.2	1.1
90°-100°	414.7	2.1
100°-110°	1126.6	5.8
110°-120°	1158.3	6.0
120°-130°	926.1	4.8
130°-140°	727.6	3.8
140°-150°	557.9	2.9
150°-160°	401.2	2.1
160°-170°	245.4	1.3
170°-180°	82.7	0.4
0°-30°	4241.5	21.9
0°-40°	6908.8	35.7
0°-60°	11548.3	59.7
0°-90°	13716.6	70.9
90°-120°	2699.5	13.9
90°-150°	4911.2	25.4
90°-180°	5640.0	29.1
0°-180°	19357.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5486	5486	5486	5486	5486	
5°	5514	5454	5471	5452	5443	523
15°	5306	5251	5273	5254	5245	1497
25°	4919	4858	4886	4833	4829	2264
35°	4333	4282	4295	4238	4234	2704
45°	3506	3460	3444	3383	3374	2686
55°	2296	2259	2244	2206	2197	2058
65°	1233	1224	1238	1228	1228	1249
75°	666	666	666	671	671	704
85°	170	179	189	189	189	198
90°	3	11	19	25	25	11
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°	5485.6	5485.6	5485.6	5485.6	5485.6
2.5°	5519.6	5471.5	5485.6	5473.6	5447.8
5°	5513.9	5453.9	5471.4	5452.3	5443.0
7.5°	5471.4	5412.3	5429.8	5410.8	5405.2
10°	5433.6	5378.2	5395.8	5376.7	5367.4
12.5°	5392.0	5332.9	5354.2	5331.3	5322.1
15°	5306.0	5250.6	5272.9	5253.8	5244.6
17.5°	5211.5	5152.4	5174.7	5152.7	5140.7
20°	5135.9	5080.5	5102.9	5069.7	5065.1
22.5°	5052.8	4997.3	5019.7	4975.3	4974.3
25°	4918.6	4858.5	4885.5	4833.4	4828.8
27.5°	4758.9	4703.4	4725.8	4672.8	4667.2
30°	4649.3	4593.8	4616.2	4559.3	4550.0
32.5°	4524.5	4472.8	4491.5	4434.6	4429.1
35°	4332.7	4281.9	4294.9	4238.1	4233.5
37.5°	4114.4	4068.2	4075.7	4013.2	4008.6
40°	3959.4	3913.2	3916.9	3850.7	3846.0
42.5°	3789.3	3743.1	3739.3	3673.0	3668.4
45°	3505.8	3459.7	3444.4	3382.8	3373.6
47.5°	3182.7	3136.5	3108.0	3057.8	3051.3
50°	2948.3	2902.1	2877.4	2834.6	2820.7
52.5°	2695.1	2648.9	2628.0	2588.9	2575.1
55°	2296.3	2259.3	2244.3	2206.3	2197.1
57.5°	1917.3	1892.4	1888.1	1851.1	1847.4
60°	1686.8	1672.9	1672.6	1639.5	1639.5
62.5°	1490.2	1480.1	1487.4	1465.6	1461.9
65°	1233.2	1223.9	1237.9	1228.5	1228.5
67.5°	1030.0	1030.0	1038.5	1034.7	1034.7
70°	916.6	916.6	921.3	921.3	921.3
72.5°	814.6	810.9	823.1	823.0	819.3
75°	666.2	666.2	666.2	670.9	670.9
77.5°	518.8	519.7	523.5	522.5	518.8
80°	420.5	425.1	425.2	420.5	420.5
82.5°	322.2	326.9	327.0	325.9	322.2
85°	170.1	179.3	189.0	189.0	189.0
87.5°	49.7	66.1	79.5	80.5	76.8
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)