

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: P563955

Luminaire Tested: **SQ4-PR1-050U-050D-840-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563955
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-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

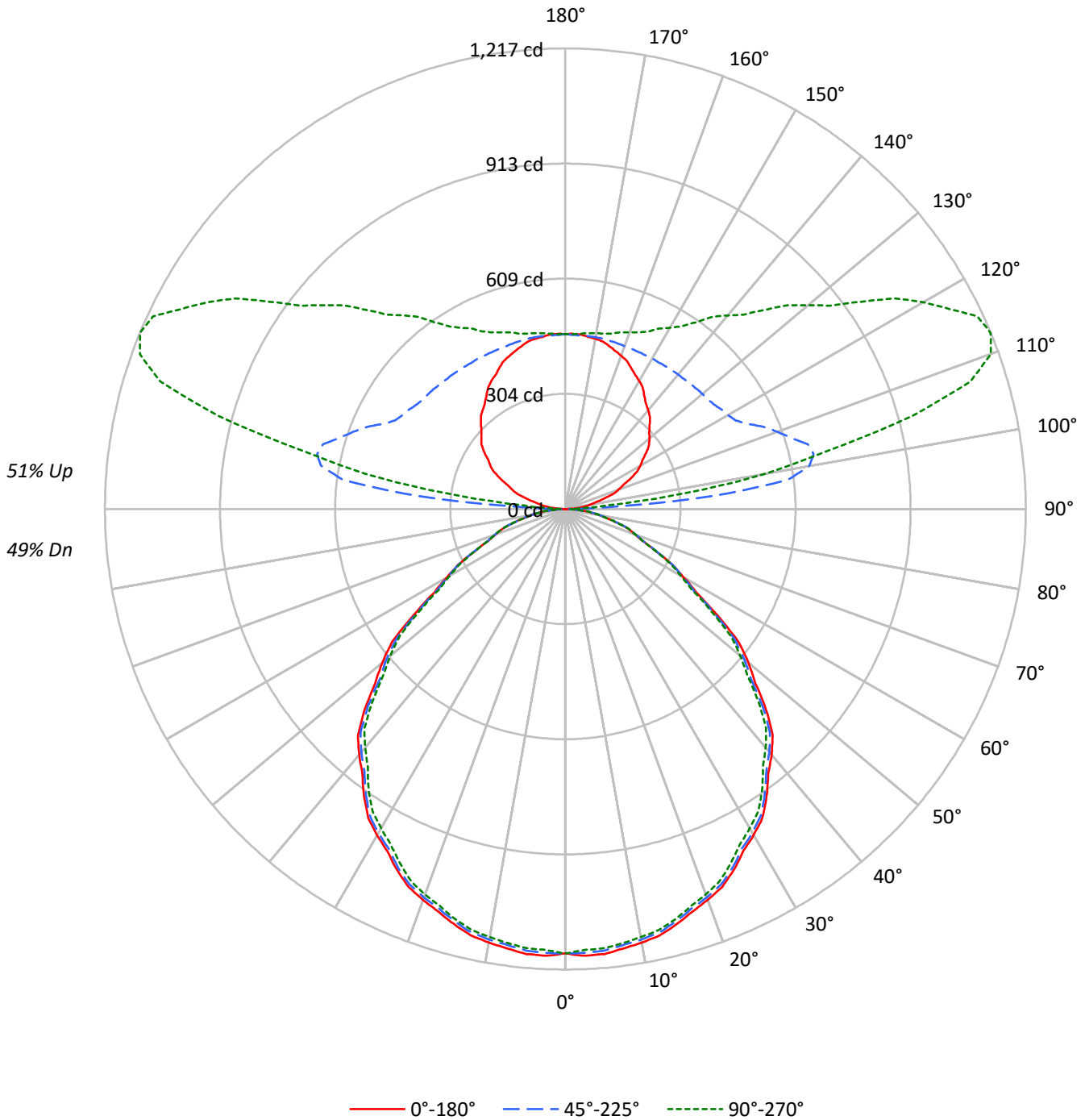
Lumens per Lamp: N/A
Luminaire Lumens: 5955.7 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 44.8
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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49		
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42		
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36		
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31		
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26		
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23		
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20		
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18		
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16		
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15		
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7146	7099	7016
30°	7070	7019	6918
35°	6965	6904	6806
40°	6806	6733	6611
45°	6529	6414	6283
50°	6040	5894	5779
55°	5272	5153	5044
60°	4442	4405	4318
65°	3842	3857	3828
70°	3528	3548	3548
75°	3389	3389	3413
80°	3188	3223	3188
85°	2569	2858	2858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	1.9
10°-20°	317.8	5.3
20°-30°	479.3	8.0
30°-40°	571.1	9.6
40°-50°	563.0	9.5
50°-60°	430.3	7.2
60°-70°	266.3	4.5
70°-80°	151.2	2.5
80°-90°	47.8	0.8
90°-100°	221.9	3.7
100°-110°	602.8	10.1
110°-120°	619.7	10.4
120°-130°	495.5	8.3
130°-140°	389.3	6.5
140°-150°	298.5	5.0
150°-160°	214.7	3.6
160°-170°	131.3	2.2
170°-180°	44.2	0.7
0°-30°	908.1	15.2
0°-40°	1479.1	24.8
0°-60°	2472.4	41.5
0°-90°	2937.7	49.3
90°-120°	1444.4	24.3
90°-150°	2627.7	44.1
90°-180°	3018.0	50.7
0°-180°	5955.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1174	1174	1174	1174	1174	
5°	1180	1168	1171	1167	1165	112
15°	1136	1124	1129	1125	1123	321
25°	1053	1040	1046	1035	1034	485
35°	928	917	920	907	906	579
45°	751	741	737	724	722	575
55°	492	484	480	472	470	440
65°	264	262	265	263	263	267
75°	143	143	143	144	144	151
85°	36	38	40	40	40	42
90°	2	6	10	13	13	4
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1174.4	1174.4	1174.4	1174.4	1174.4
2.5°	1181.7	1171.4	1174.4	1171.9	1166.3
5°	1180.5	1167.6	1171.4	1167.3	1165.3
7.5°	1171.4	1158.7	1162.5	1158.4	1157.2
10°	1163.3	1151.4	1155.2	1151.1	1149.1
12.5°	1154.4	1141.7	1146.3	1141.4	1139.4
15°	1136.0	1124.1	1128.9	1124.8	1122.8
17.5°	1115.8	1103.1	1107.9	1103.2	1100.6
20°	1099.6	1087.7	1092.5	1085.4	1084.4
22.5°	1081.8	1069.9	1074.7	1065.2	1065.0
25°	1053.0	1040.2	1046.0	1034.8	1033.8
27.5°	1018.9	1007.0	1011.8	1000.4	999.2
30°	995.4	983.5	988.3	976.1	974.1
32.5°	968.7	957.6	961.6	949.4	948.2
35°	927.6	916.7	919.5	907.4	906.4
37.5°	880.9	871.0	872.6	859.2	858.2
40°	847.7	837.8	838.6	824.4	823.4
42.5°	811.3	801.4	800.6	786.4	785.4
45°	750.6	740.7	737.4	724.2	722.3
47.5°	681.4	671.5	665.4	654.7	653.3
50°	631.2	621.3	616.0	606.9	603.9
52.5°	577.0	567.1	562.6	554.3	551.3
55°	491.6	483.7	480.5	472.4	470.4
57.5°	410.5	405.2	404.2	396.3	395.5
60°	361.1	358.2	358.1	351.0	351.0
62.5°	319.1	316.9	318.4	313.8	313.0
65°	264.0	262.0	265.0	263.0	263.0
67.5°	220.5	220.5	222.3	221.5	221.5
70°	196.2	196.2	197.3	197.3	197.3
72.5°	174.4	173.6	176.2	176.2	175.4
75°	142.6	142.6	142.6	143.6	143.6
77.5°	111.1	111.3	112.1	111.9	111.1
80°	90.0	91.0	91.0	90.0	90.0
82.5°	69.0	70.0	70.0	69.8	69.0
85°	36.4	38.4	40.5	40.5	40.5
87.5°	10.8	14.9	18.3	18.8	18.1
90°	1.5	5.8	10.4	13.4	13.4
92.5°	13.4	60.8	105.5	45.3	38.3
95°	32.7	121.3	386.4	168.2	113.0
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.5
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.1	596.0	1125.2	1196.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.6	211.2	567.4	1109.4	1216.6
115°	190.2	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.9	266.7	496.4	928.2	1092.4
122.5°	242.0	279.7	489.3	876.9	1035.3
125°	261.6	297.9	480.1	808.8	954.2
127.5°	279.1	315.2	475.0	757.2	881.9
130°	289.8	324.7	472.6	724.8	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	350.0	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	624.9	695.9
140°	340.3	370.9	463.7	603.4	667.3
142.5°	349.9	378.0	462.5	586.5	640.0
145°	364.1	390.3	460.7	559.8	601.9
147.5°	380.2	402.6	459.2	538.8	571.9
150°	390.9	409.8	459.2	526.7	552.9
152.5°	399.2	415.8	458.1	515.9	537.4
155°	411.7	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.1
167.5°	453.9	456.8	460.7	473.5	474.7
170°	456.3	459.2	460.7	471.1	471.1
172.5°	458.6	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)