

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

Brand: CORELITE

Report Number: P688515

Luminaire Tested: SQ4R-PH1-100D-930-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688515
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-100D-930-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2921.2 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

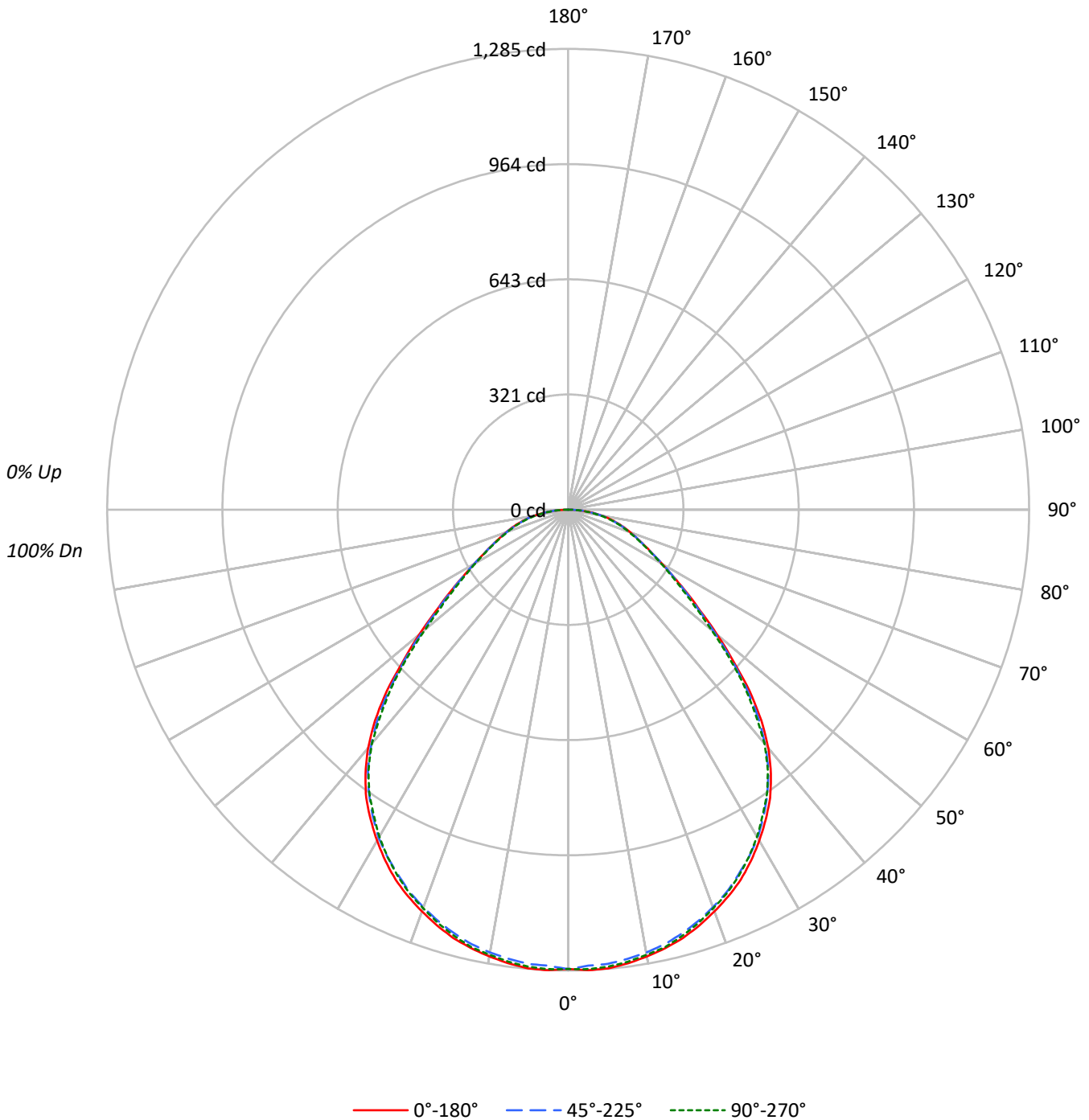
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12330	12330	12330
5°	12407	12285	12361
10°	12365	12257	12319
15°	12323	12197	12260
20°	12213	12084	12116
25°	12093	11924	11958
30°	11846	11740	11706
35°	11539	11372	11353
40°	10909	10730	10690
45°	9729	9536	9428
50°	8122	7956	7791
55°	6768	6687	6528
60°	5815	5846	5722
65°	5331	5294	5224
70°	5162	5117	5030
75°	5234	5118	4999
80°	5261	5173	4995
85°	5070	5070	4717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9729 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.5	4.2
10°-20°	347.0	11.9
20°-30°	519.8	17.8
30°-40°	604.9	20.7
40°-50°	538.0	18.4
50°-60°	361.2	12.4
60°-70°	233.5	8.0
70°-80°	145.5	5.0
80°-90°	49.9	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	988.3	33.8
0°-40°	1593.2	54.5
0°-60°	2492.3	85.3
0°-90°	2921.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2921.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1284	1281	1271	1281	1279	122
15°	1236	1233	1224	1232	1230	349
25°	1138	1134	1122	1129	1126	523
35°	982	977	968	968	966	610
45°	715	712	700	691	692	546
55°	403	403	398	392	389	365
65°	234	236	232	231	229	234
75°	141	139	138	138	134	148
85°	46	47	46	44	43	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1280.7	1280.7	1280.7	1280.7	1280.7
2.5°	1285.4	1282.2	1272.8	1283.8	1282.2
5°	1283.8	1280.7	1271.2	1280.7	1279.1
7.5°	1275.9	1274.3	1263.3	1274.3	1271.2
10°	1264.8	1264.8	1253.8	1263.3	1260.1
12.5°	1252.2	1250.6	1241.1	1250.6	1249.0
15°	1236.4	1233.2	1223.7	1231.6	1230.1
17.5°	1215.8	1214.3	1203.2	1211.1	1207.9
20°	1192.1	1189.0	1179.5	1185.8	1182.6
22.5°	1166.8	1163.7	1154.2	1158.9	1157.3
25°	1138.4	1133.6	1122.5	1128.9	1125.7
27.5°	1103.6	1102.0	1090.9	1094.1	1090.9
30°	1065.6	1064.1	1056.1	1056.1	1053.0
32.5°	1024.5	1026.1	1013.5	1015.0	1008.7
35°	981.8	977.1	967.6	967.6	966.0
37.5°	928.1	924.9	917.0	915.4	913.9
40°	868.0	864.8	853.8	850.6	850.6
42.5°	796.9	793.7	782.6	777.9	771.6
45°	714.6	711.5	700.4	690.9	692.5
47.5°	622.9	626.1	615.0	607.1	605.5
50°	542.3	540.7	531.2	526.5	520.2
52.5°	464.8	466.4	458.5	455.3	447.4
55°	403.2	403.2	398.4	392.1	388.9
57.5°	347.8	351.0	346.3	343.1	339.9
60°	302.0	303.6	303.6	297.2	297.2
62.5°	264.0	265.6	264.0	260.9	260.9
65°	234.0	235.6	232.4	230.8	229.3
67.5°	207.1	208.7	207.1	205.5	202.4
70°	183.4	183.4	181.8	181.8	178.7
72.5°	162.8	161.3	159.7	159.7	158.1
75°	140.7	139.1	137.6	137.6	134.4
77.5°	118.6	117.0	117.0	113.8	112.3
80°	94.9	94.9	93.3	91.7	90.1
82.5°	72.7	71.1	69.6	68.0	66.4
85°	45.9	47.4	45.9	44.3	42.7
87.5°	20.6	22.1	22.1	22.1	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)