

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: P688745

Luminaire Tested: SQ4R-PH1-075D-93050-1-UNV-STD-W-4\_4000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688745  
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-PH1-075D-93050-1-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2976.8 lumens  
Efficiency: N/A  
Efficacy: 90.2 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

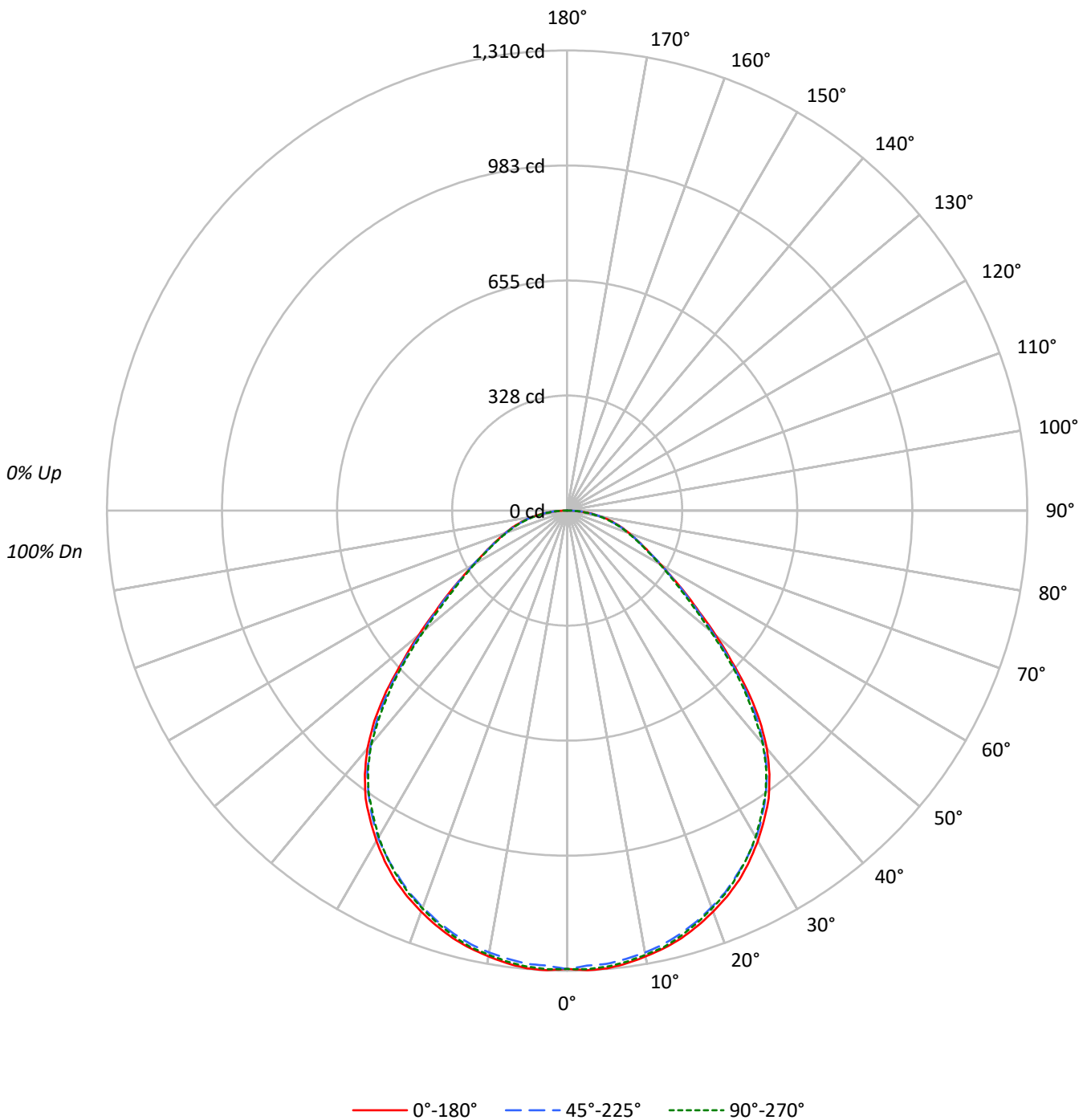
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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

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

	0°	45°	90°
0°	12564	12564	12564
5°	12643	12518	12596
10°	12600	12490	12553
15°	12557	12429	12493
20°	12446	12314	12346
25°	12322	12151	12185
30°	12072	11964	11928
35°	11759	11588	11569
40°	11116	10934	10894
45°	9915	9717	9608
50°	8277	8107	7940
55°	6895	6815	6652
60°	5925	5955	5832
65°	5431	5394	5321
70°	5261	5216	5126
75°	5334	5215	5092
80°	5361	5273	5090
85°	5159	5159	4805

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9915 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	4.2
10°-20°	353.6	11.9
20°-30°	529.7	17.8
30°-40°	616.4	20.7
40°-50°	548.2	18.4
50°-60°	368.1	12.4
60°-70°	237.9	8.0
70°-80°	148.3	5.0
80°-90°	50.8	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°	1007.1	33.8
0°-40°	1623.4	54.5
0°-60°	2539.7	85.3
0°-90°	2976.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2976.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1308	1305	1295	1305	1303	124
15°	1260	1257	1247	1255	1253	355
25°	1160	1155	1144	1150	1147	533
35°	1000	996	986	986	984	622
45°	728	725	714	704	706	557
55°	411	411	406	400	396	372
65°	238	240	237	235	234	239
75°	143	142	140	140	137	151
85°	47	48	47	45	44	52
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1305.0	1305.0	1305.0	1305.0	1305.0
2.5°	1309.8	1306.6	1296.9	1308.2	1306.6
5°	1308.2	1305.0	1295.3	1305.0	1303.4
7.5°	1300.2	1298.6	1287.3	1298.6	1295.3
10°	1288.9	1288.9	1277.6	1287.3	1284.1
12.5°	1276.0	1274.4	1264.7	1274.4	1272.8
15°	1259.9	1256.7	1247.0	1255.1	1253.4
17.5°	1238.9	1237.3	1226.1	1234.1	1230.9
20°	1214.8	1211.6	1201.9	1208.3	1205.1
22.5°	1189.0	1185.8	1176.1	1180.9	1179.3
25°	1160.0	1155.2	1143.9	1150.3	1147.1
27.5°	1124.6	1122.9	1111.7	1114.9	1111.7
30°	1085.9	1084.3	1076.2	1076.2	1073.0
32.5°	1044.0	1045.6	1032.7	1034.3	1027.9
35°	1000.5	995.7	986.0	986.0	984.4
37.5°	945.7	942.5	934.4	932.8	931.2
40°	884.5	881.3	870.0	866.8	866.8
42.5°	812.0	808.8	797.5	792.7	786.2
45°	728.2	725.0	713.7	704.1	705.7
47.5°	634.8	638.0	626.7	618.7	617.1
50°	552.6	551.0	541.3	536.5	530.1
52.5°	473.7	475.3	467.2	464.0	455.9
55°	410.8	410.8	406.0	399.6	396.3
57.5°	354.4	357.7	352.8	349.6	346.4
60°	307.7	309.3	309.3	302.9	302.9
62.5°	269.1	270.7	269.1	265.8	265.8
65°	238.4	240.1	236.8	235.2	233.6
67.5°	211.1	212.7	211.1	209.4	206.2
70°	186.9	186.9	185.3	185.3	182.1
72.5°	165.9	164.3	162.7	162.7	161.1
75°	143.4	141.8	140.2	140.2	136.9
77.5°	120.8	119.2	119.2	116.0	114.4
80°	96.7	96.7	95.1	93.4	91.8
82.5°	74.1	72.5	70.9	69.3	67.7
85°	46.7	48.3	46.7	45.1	43.5
87.5°	20.9	22.6	22.6	22.6	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)