

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: P688735

Luminaire Tested: SQ4R-PH1-075D-92765-1-UNV-STD-W-4\_2700K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688735  
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-92765-1-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
750 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2601.8 lumens  
Efficiency: N/A  
Efficacy: 79.8 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

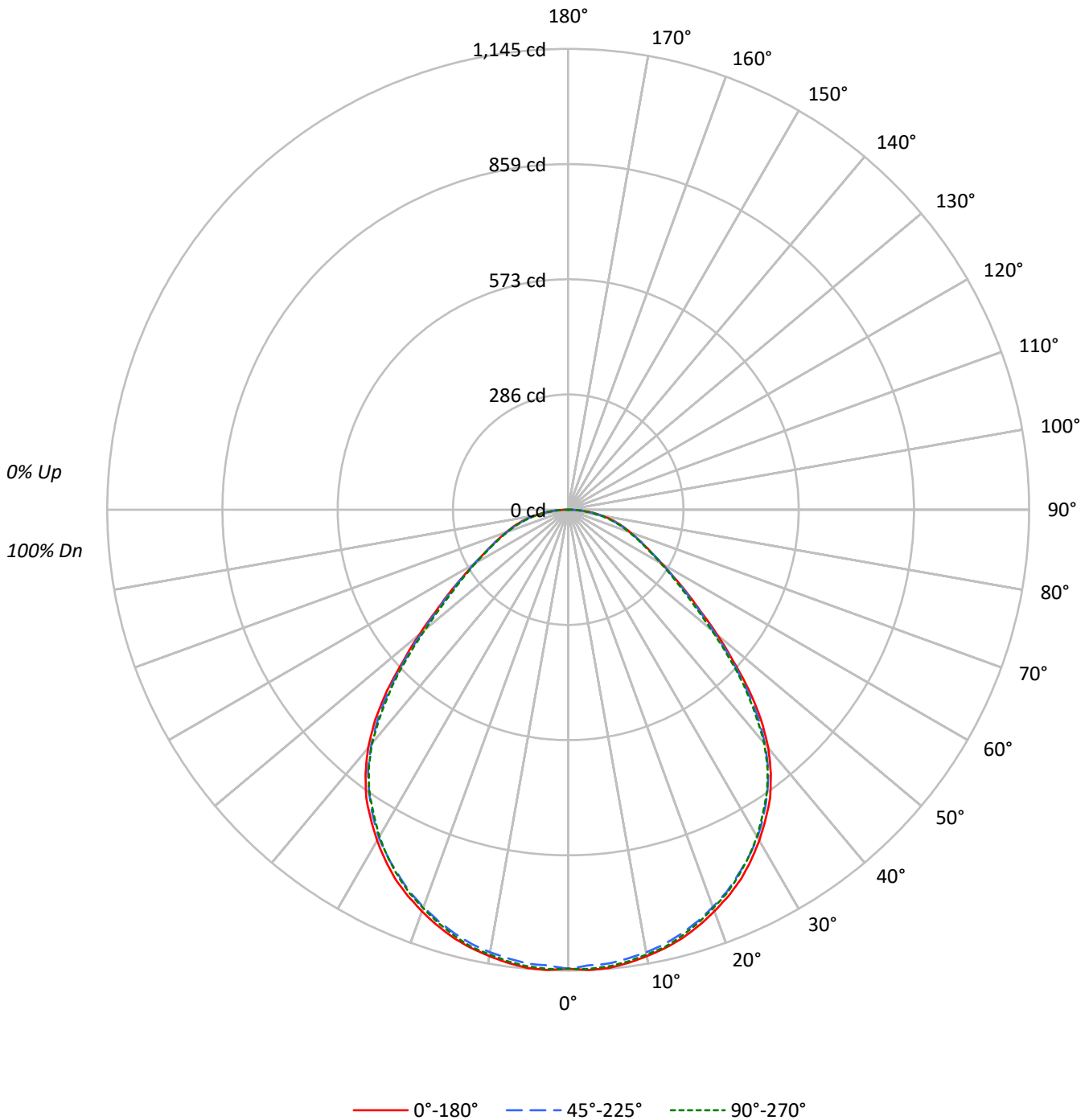
Input Watts (W): 32.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	10981	10981	10981
5°	11050	10942	11009
10°	11013	10917	10971
15°	10976	10863	10919
20°	10877	10763	10791
25°	10770	10620	10650
30°	10551	10456	10425
35°	10278	10129	10112
40°	9716	9556	9521
45°	8666	8493	8398
50°	7234	7086	6939
55°	6027	5957	5814
60°	5180	5206	5097
65°	4747	4716	4652
70°	4597	4557	4478
75°	4661	4557	4453
80°	4685	4607	4452
85°	4507	4507	4198

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8666 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.2	4.2
10°-20°	309.1	11.9
20°-30°	463.0	17.8
30°-40°	538.7	20.7
40°-50°	479.1	18.4
50°-60°	321.7	12.4
60°-70°	208.0	8.0
70°-80°	129.6	5.0
80°-90°	44.4	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°	880.2	33.8
0°-40°	1418.9	54.5
0°-60°	2219.8	85.3
0°-90°	2601.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2601.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1143	1141	1132	1141	1139	109
15°	1101	1098	1090	1097	1096	310
25°	1014	1010	1000	1005	1003	466
35°	874	870	862	862	860	544
45°	636	634	624	615	617	487
55°	359	359	355	349	346	325
65°	208	210	207	206	204	209
75°	125	124	122	122	120	132
85°	41	42	41	39	38	45
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1140.6	1140.6	1140.6	1140.6	1140.6
2.5°	1144.8	1142.0	1133.6	1143.4	1142.0
5°	1143.4	1140.6	1132.2	1140.6	1139.2
7.5°	1136.4	1135.0	1125.1	1135.0	1132.2
10°	1126.5	1126.5	1116.7	1125.1	1122.3
12.5°	1115.3	1113.8	1105.4	1113.8	1112.4
15°	1101.2	1098.4	1089.9	1097.0	1095.5
17.5°	1082.9	1081.5	1071.6	1078.6	1075.8
20°	1061.7	1058.9	1050.5	1056.1	1053.3
22.5°	1039.2	1036.4	1028.0	1032.2	1030.8
25°	1013.9	1009.6	999.8	1005.4	1002.6
27.5°	982.9	981.5	971.6	974.4	971.6
30°	949.1	947.7	940.6	940.6	937.8
32.5°	912.5	913.9	902.6	904.0	898.4
35°	874.5	870.2	861.8	861.8	860.4
37.5°	826.6	823.8	816.7	815.3	813.9
40°	773.1	770.3	760.4	757.6	757.6
42.5°	709.7	706.9	697.0	692.8	687.2
45°	636.5	633.7	623.8	615.4	616.8
47.5°	554.8	557.6	547.8	540.7	539.3
50°	483.0	481.6	473.1	468.9	463.3
52.5°	414.0	415.4	408.4	405.5	398.5
55°	359.1	359.1	354.9	349.2	346.4
57.5°	309.8	312.6	308.4	305.6	302.8
60°	269.0	270.4	270.4	264.7	264.7
62.5°	235.2	236.6	235.2	232.3	232.3
65°	208.4	209.8	207.0	205.6	204.2
67.5°	184.5	185.9	184.5	183.1	180.2
70°	163.3	163.3	161.9	161.9	159.1
72.5°	145.0	143.6	142.2	142.2	140.8
75°	125.3	123.9	122.5	122.5	119.7
77.5°	105.6	104.2	104.2	101.4	100.0
80°	84.5	84.5	83.1	81.7	80.3
82.5°	64.8	63.4	62.0	60.6	59.1
85°	40.8	42.2	40.8	39.4	38.0
87.5°	18.3	19.7	19.7	19.7	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)