

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: P688505

Luminaire Tested: SQ4R-PH1-050D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688505
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-PH1-050D-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1579.4 lumens
Efficiency: N/A
Efficacy: 83.6 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

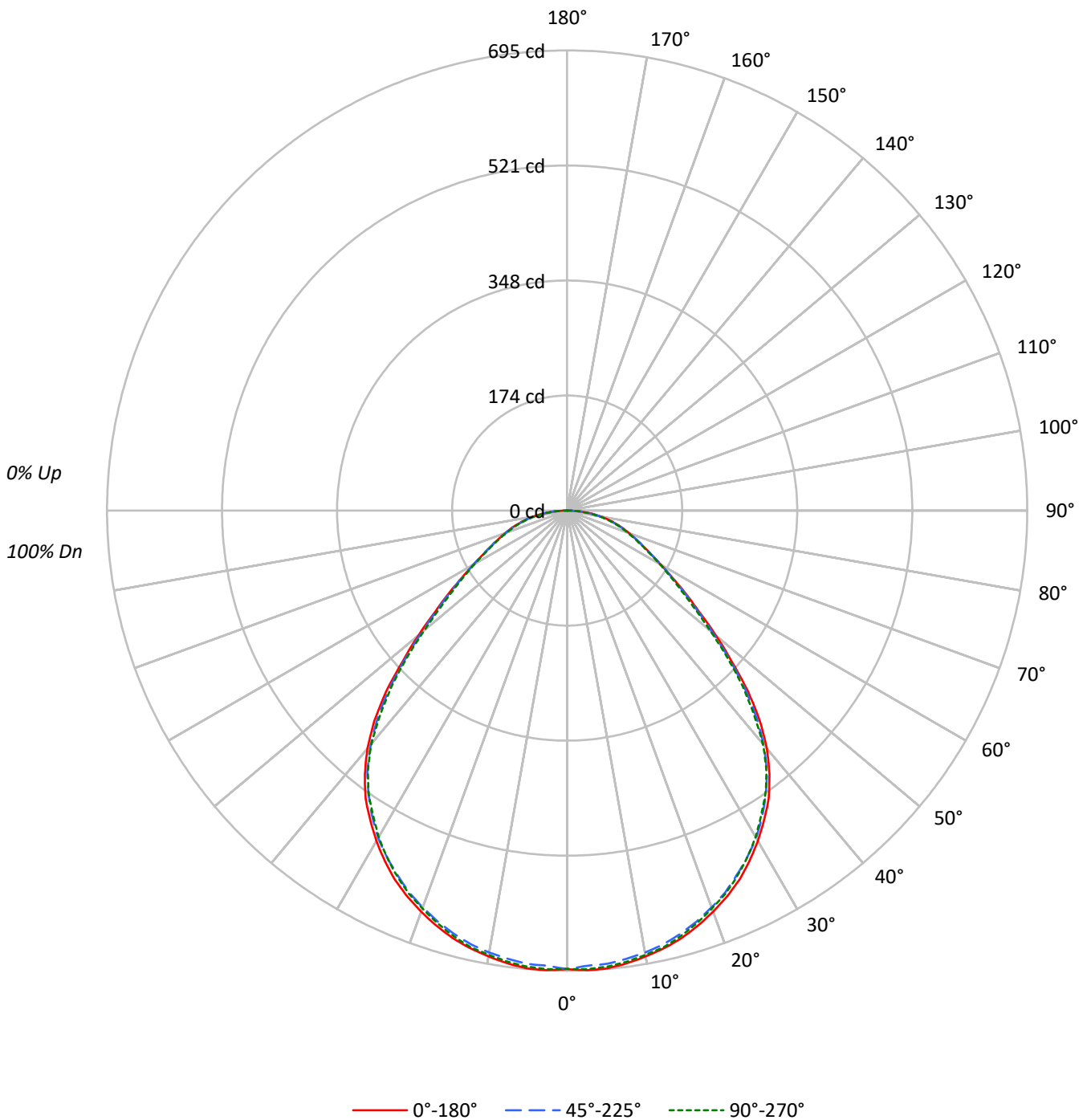
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	6666	6666	6666
5°	6708	6641	6683
10°	6685	6626	6660
15°	6662	6594	6628
20°	6603	6533	6551
25°	6537	6447	6465
30°	6404	6348	6329
35°	6238	6148	6138
40°	5898	5801	5780
45°	5261	5156	5098
50°	4391	4302	4212
55°	3659	3615	3530
60°	3144	3160	3094
65°	2882	2863	2822
70°	2792	2767	2719
75°	2831	2767	2704
80°	2844	2794	2700
85°	2739	2739	2552

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5261 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	4.2
10°-20°	187.6	11.9
20°-30°	281.0	17.8
30°-40°	327.0	20.7
40°-50°	290.8	18.4
50°-60°	195.3	12.4
60°-70°	126.2	8.0
70°-80°	78.7	5.0
80°-90°	27.0	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°	534.3	33.8
0°-40°	861.3	54.5
0°-60°	1347.5	85.3
0°-90°	1579.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1579.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	692	692	692	692	692	
5°	694	692	687	692	692	66
15°	668	667	662	666	665	188
25°	615	613	607	610	609	283
35°	531	528	523	523	522	330
45°	386	385	379	374	374	295
55°	218	218	215	212	210	198
65°	126	127	126	125	124	127
75°	76	75	74	74	73	80
85°	25	26	25	24	23	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	692.4	692.4	692.4	692.4	692.4
2.5°	694.9	693.2	688.1	694.1	693.2
5°	694.1	692.4	687.2	692.4	691.5
7.5°	689.8	689.0	683.0	689.0	687.2
10°	683.8	683.8	677.8	683.0	681.3
12.5°	677.0	676.1	671.0	676.1	675.3
15°	668.4	666.7	661.6	665.9	665.0
17.5°	657.3	656.5	650.5	654.8	653.1
20°	644.5	642.8	637.7	641.1	639.4
22.5°	630.8	629.1	624.0	626.6	625.7
25°	615.4	612.9	606.9	610.3	608.6
27.5°	596.6	595.8	589.8	591.5	589.8
30°	576.1	575.3	571.0	571.0	569.3
32.5°	553.9	554.8	547.9	548.8	545.4
35°	530.8	528.3	523.1	523.1	522.3
37.5°	501.8	500.0	495.8	494.9	494.1
40°	469.3	467.6	461.6	459.9	459.9
42.5°	430.8	429.1	423.1	420.6	417.1
45°	386.4	384.7	378.7	373.5	374.4
47.5°	336.8	338.5	332.5	328.2	327.4
50°	293.2	292.3	287.2	284.6	281.2
52.5°	251.3	252.2	247.9	246.2	241.9
55°	218.0	218.0	215.4	212.0	210.3
57.5°	188.1	189.8	187.2	185.5	183.8
60°	163.3	164.1	164.1	160.7	160.7
62.5°	142.7	143.6	142.7	141.0	141.0
65°	126.5	127.4	125.7	124.8	123.9
67.5°	112.0	112.8	112.0	111.1	109.4
70°	99.2	99.2	98.3	98.3	96.6
72.5°	88.0	87.2	86.3	86.3	85.5
75°	76.1	75.2	74.4	74.4	72.7
77.5°	64.1	63.3	63.3	61.5	60.7
80°	51.3	51.3	50.4	49.6	48.7
82.5°	39.3	38.5	37.6	36.8	35.9
85°	24.8	25.6	24.8	23.9	23.1
87.5°	11.1	12.0	12.0	12.0	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)