

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: P688504

Luminaire Tested: SQ4R-PH1-050D-935-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688504
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-935-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1586.3 lumens
Efficiency: N/A
Efficacy: 83.9 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

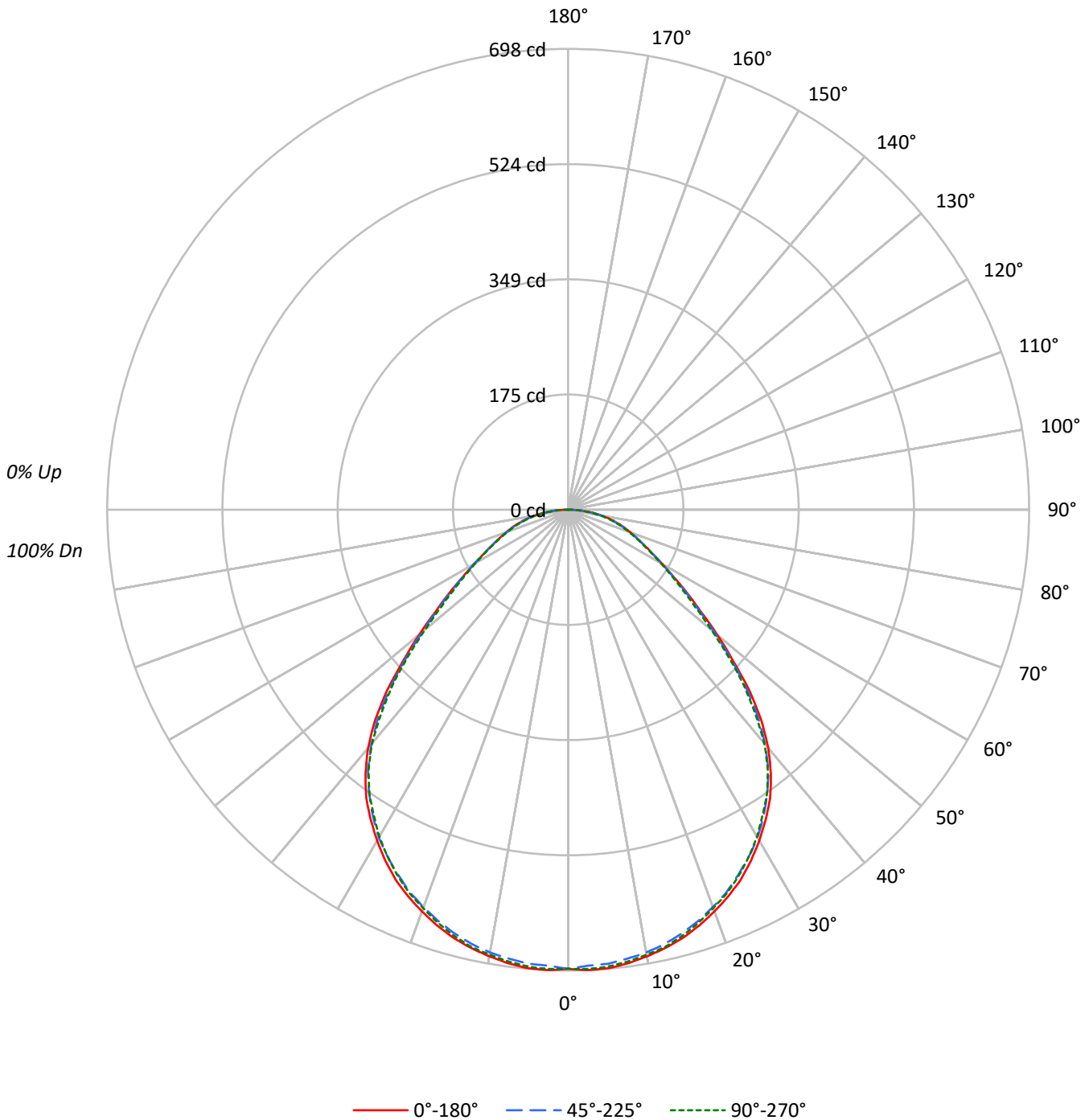
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	6695	6695	6695
5°	6738	6671	6713
10°	6715	6656	6690
15°	6692	6623	6658
20°	6633	6562	6579
25°	6567	6476	6494
30°	6433	6375	6357
35°	6267	6175	6166
40°	5924	5826	5805
45°	5284	5178	5121
50°	4411	4321	4231
55°	3674	3632	3545
60°	3158	3173	3108
65°	2895	2875	2836
70°	2804	2778	2730
75°	2842	2779	2715
80°	2855	2811	2711
85°	2750	2750	2563

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5284 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	4.2
10°-20°	188.4	11.9
20°-30°	282.3	17.8
30°-40°	328.5	20.7
40°-50°	292.1	18.4
50°-60°	196.2	12.4
60°-70°	126.8	8.0
70°-80°	79.0	5.0
80°-90°	27.1	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°	536.7	33.8
0°-40°	865.1	54.5
0°-60°	1353.4	85.3
0°-90°	1586.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1586.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	697	695	690	695	695	66
15°	671	670	664	669	668	189
25°	618	616	610	613	611	284
35°	533	531	525	525	525	331
45°	388	386	380	375	376	297
55°	219	219	216	213	211	198
65°	127	128	126	125	124	127
75°	76	76	75	75	73	80
85°	25	26	25	24	23	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.4	695.4	695.4	695.4	695.4
2.5°	698.0	696.3	691.2	697.2	696.3
5°	697.2	695.4	690.3	695.4	694.6
7.5°	692.9	692.0	686.0	692.0	690.3
10°	686.9	686.9	680.9	686.0	684.3
12.5°	680.0	679.1	674.0	679.1	678.3
15°	671.4	669.7	664.5	668.8	668.0
17.5°	660.2	659.4	653.4	657.7	656.0
20°	647.4	645.6	640.5	643.9	642.2
22.5°	633.6	631.9	626.8	629.3	628.5
25°	618.2	615.6	609.6	613.0	611.3
27.5°	599.3	598.4	592.4	594.1	592.4
30°	578.7	577.8	573.5	573.5	571.8
32.5°	556.4	557.2	550.3	551.2	547.8
35°	533.2	530.6	525.4	525.4	524.6
37.5°	504.0	502.3	498.0	497.1	496.3
40°	471.4	469.6	463.6	461.9	461.9
42.5°	432.7	431.0	425.0	422.4	419.0
45°	388.1	386.4	380.3	375.2	376.1
47.5°	338.3	340.0	334.0	329.7	328.8
50°	294.5	293.6	288.5	285.9	282.5
52.5°	252.4	253.3	249.0	247.3	243.0
55°	218.9	218.9	216.4	212.9	211.2
57.5°	188.9	190.6	188.0	186.3	184.6
60°	164.0	164.8	164.8	161.4	161.4
62.5°	143.4	144.2	143.4	141.7	141.7
65°	127.1	127.9	126.2	125.4	124.5
67.5°	112.5	113.3	112.5	111.6	109.9
70°	99.6	99.6	98.7	98.7	97.0
72.5°	88.4	87.6	86.7	86.7	85.9
75°	76.4	75.6	74.7	74.7	73.0
77.5°	64.4	63.5	63.5	61.8	61.0
80°	51.5	51.5	50.7	49.8	48.9
82.5°	39.5	38.6	37.8	36.9	36.1
85°	24.9	25.8	24.9	24.0	23.2
87.5°	11.2	12.0	12.0	12.0	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)