

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: P688500

Luminaire Tested: SQ4R-PH1-050D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688500
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1806.0 lumens
Efficiency: N/A
Efficacy: 95.6 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

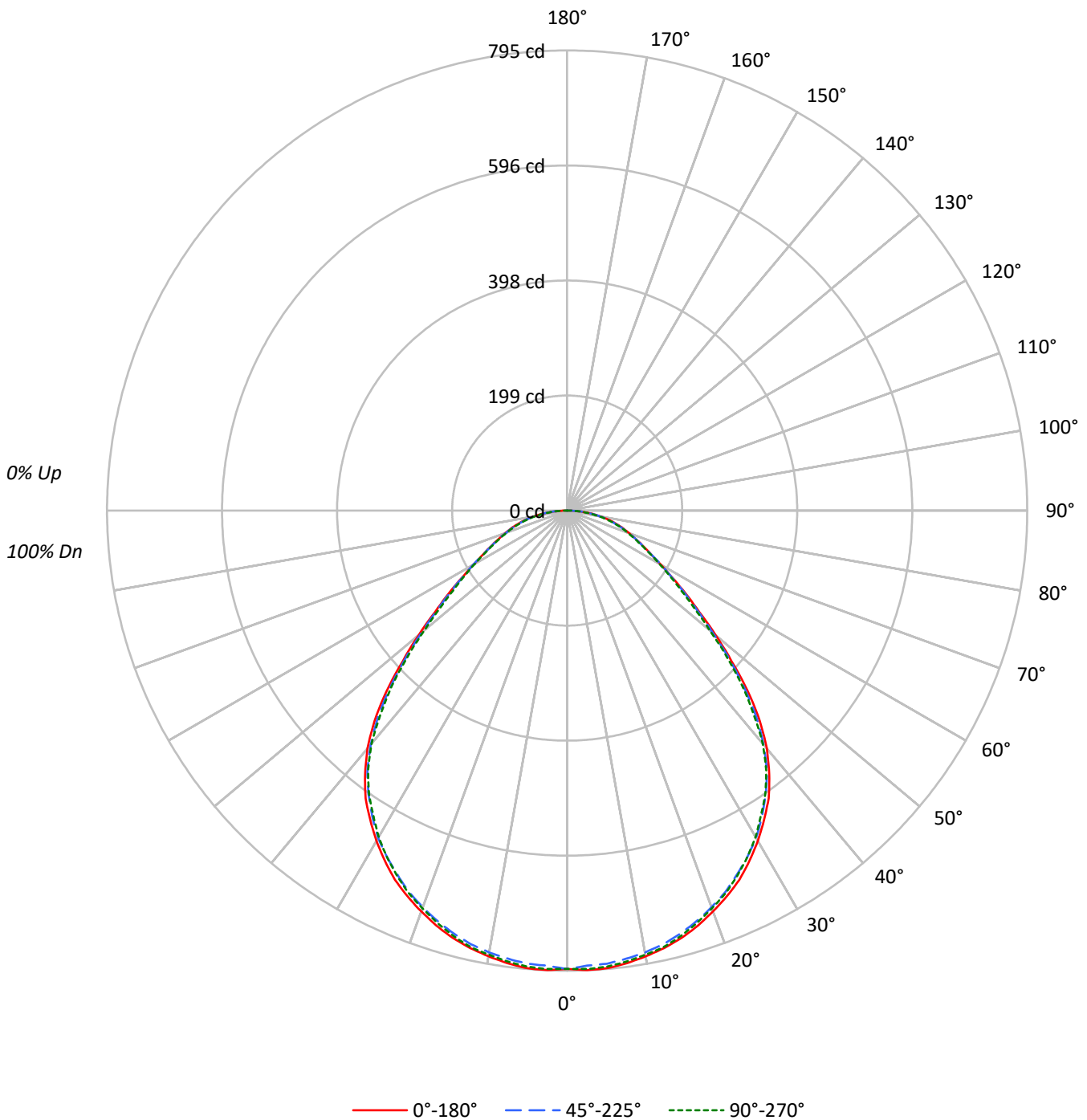
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7623	7623	7623
5°	7670	7595	7642
10°	7645	7577	7615
15°	7619	7541	7580
20°	7551	7471	7490
25°	7476	7372	7393
30°	7324	7259	7237
35°	7134	7031	7019
40°	6744	6633	6609
45°	6015	5895	5829
50°	5022	4919	4817
55°	4184	4134	4037
60°	3595	3614	3539
65°	3296	3274	3228
70°	3192	3164	3110
75°	3236	3162	3091
80°	3249	3199	3088
85°	3126	3126	2916

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6015 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	4.2
10°-20°	214.5	11.9
20°-30°	321.4	17.8
30°-40°	374.0	20.7
40°-50°	332.6	18.4
50°-60°	223.3	12.4
60°-70°	144.3	8.0
70°-80°	90.0	5.0
80°-90°	30.8	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°	611.0	33.8
0°-40°	985.0	54.5
0°-60°	1540.9	85.3
0°-90°	1806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1806.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	792	792	792	792	792	
5°	794	792	786	792	791	75
15°	764	762	757	762	760	215
25°	704	701	694	698	696	324
35°	607	604	598	598	597	377
45°	442	440	433	427	428	338
55°	249	249	246	242	240	226
65°	145	146	144	143	142	145
75°	87	86	85	85	83	92
85°	28	29	28	27	26	31
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	791.8	791.8	791.8	791.8	791.8
2.5°	794.7	792.7	786.9	793.7	792.7
5°	793.7	791.8	785.9	791.8	790.8
7.5°	788.8	787.8	781.0	787.8	785.9
10°	782.0	782.0	775.1	781.0	779.0
12.5°	774.2	773.2	767.3	773.2	772.2
15°	764.4	762.4	756.6	761.5	760.5
17.5°	751.7	750.7	743.9	748.7	746.8
20°	737.0	735.1	729.2	733.1	731.1
22.5°	721.4	719.4	713.6	716.5	715.5
25°	703.8	700.8	694.0	697.9	696.0
27.5°	682.3	681.3	674.5	676.4	674.5
30°	658.8	657.8	653.0	653.0	651.0
32.5°	633.4	634.4	626.6	627.5	623.6
35°	607.0	604.1	598.2	598.2	597.2
37.5°	573.8	571.8	566.9	566.0	565.0
40°	536.6	534.7	527.8	525.9	525.9
42.5°	492.6	490.7	483.8	480.9	477.0
45°	441.8	439.9	433.0	427.2	428.1
47.5°	385.1	387.1	380.2	375.3	374.4
50°	335.3	334.3	328.4	325.5	321.6
52.5°	287.4	288.4	283.5	281.5	276.6
55°	249.3	249.3	246.3	242.4	240.5
57.5°	215.0	217.0	214.1	212.1	210.2
60°	186.7	187.7	187.7	183.8	183.8
62.5°	163.2	164.2	163.2	161.3	161.3
65°	144.7	145.6	143.7	142.7	141.7
67.5°	128.0	129.0	128.0	127.1	125.1
70°	113.4	113.4	112.4	112.4	110.5
72.5°	100.7	99.7	98.7	98.7	97.7
75°	87.0	86.0	85.0	85.0	83.1
77.5°	73.3	72.3	72.3	70.4	69.4
80°	58.6	58.6	57.7	56.7	55.7
82.5°	45.0	44.0	43.0	42.0	41.1
85°	28.3	29.3	28.3	27.4	26.4
87.5°	12.7	13.7	13.7	13.7	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)