

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: P688734

Luminaire Tested: SQ4R-PH1-050D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688734
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-93050-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2020.7 lumens
Efficiency: N/A
Efficacy: 95.3 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

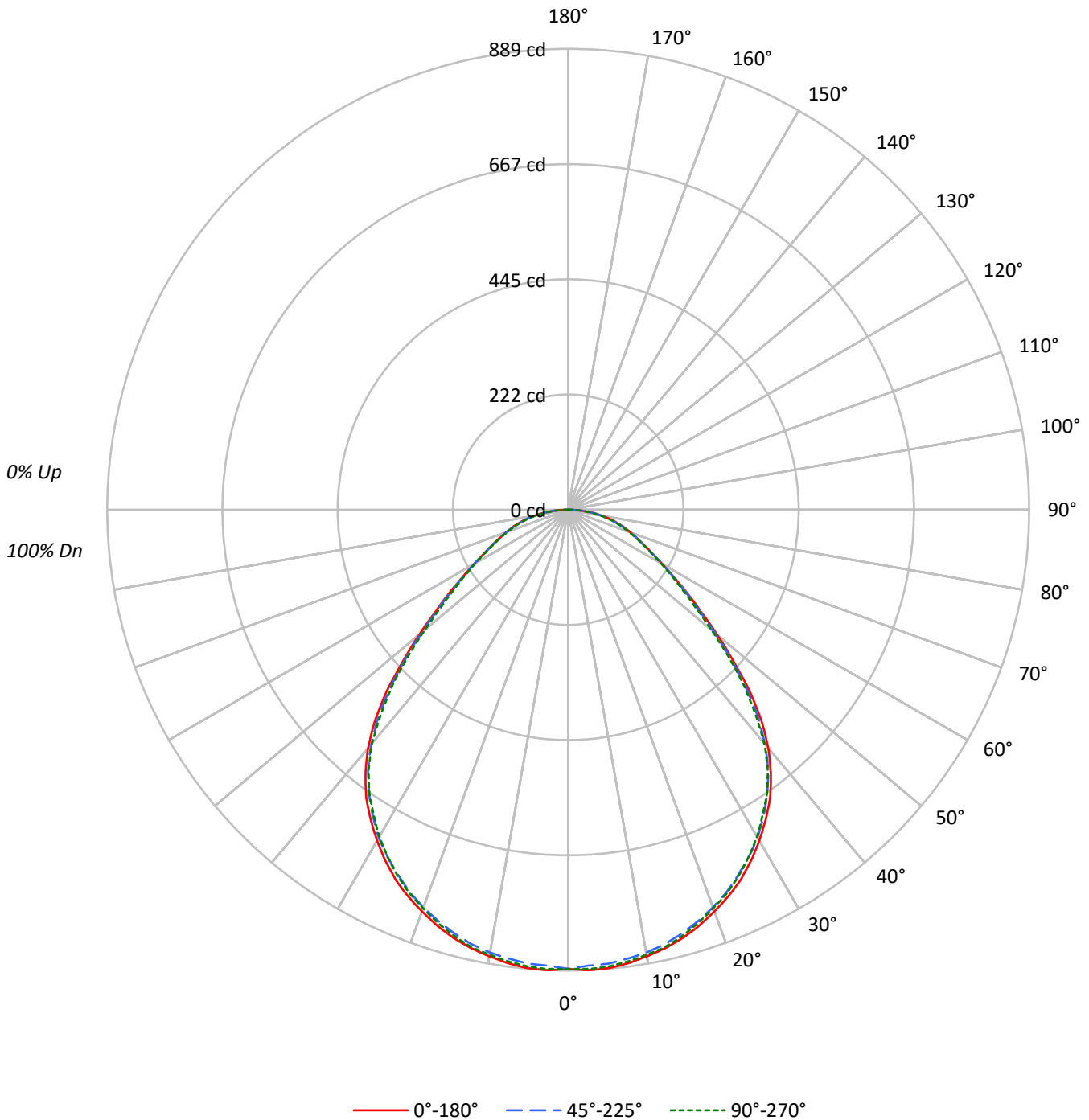
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	8529	8529	8529
5°	8583	8498	8551
10°	8553	8479	8522
15°	8525	8437	8481
20°	8448	8359	8382
25°	8364	8248	8272
30°	8194	8122	8097
35°	7983	7866	7853
40°	7546	7422	7395
45°	6730	6597	6522
50°	5618	5504	5389
55°	4681	4626	4515
60°	4022	4043	3959
65°	3688	3663	3613
70°	3572	3541	3479
75°	3619	3537	3459
80°	3637	3576	3454
85°	3502	3502	3259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6730 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	4.2
10°-20°	240.0	11.9
20°-30°	359.6	17.8
30°-40°	418.4	20.7
40°-50°	372.1	18.4
50°-60°	249.9	12.4
60°-70°	161.5	8.0
70°-80°	100.7	5.0
80°-90°	34.5	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°	683.6	33.8
0°-40°	1102.0	54.5
0°-60°	1724.0	85.3
0°-90°	2020.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2020.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	886	886	886	886	886	
5°	888	886	879	886	885	84
15°	855	853	846	852	851	241
25°	787	784	776	781	779	362
35°	679	676	669	669	668	422
45°	494	492	484	478	479	378
55°	279	279	276	271	269	253
65°	162	163	161	160	159	162
75°	97	96	95	95	93	102
85°	32	33	32	31	30	35
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	885.9	885.9	885.9	885.9	885.9
2.5°	889.2	887.0	880.4	888.1	887.0
5°	888.1	885.9	879.3	885.9	884.8
7.5°	882.6	881.5	873.8	881.5	879.3
10°	874.9	874.9	867.3	873.8	871.7
12.5°	866.2	865.1	858.5	865.1	864.0
15°	855.3	853.1	846.5	852.0	850.9
17.5°	841.0	839.9	832.3	837.8	835.6
20°	824.6	822.4	815.9	820.3	818.1
22.5°	807.1	804.9	798.4	801.7	800.6
25°	787.4	784.2	776.5	780.9	778.7
27.5°	763.4	762.3	754.6	756.8	754.6
30°	737.1	736.0	730.6	730.6	728.4
32.5°	708.7	709.8	701.0	702.1	697.8
35°	679.2	675.9	669.3	669.3	668.2
37.5°	642.0	639.8	634.3	633.2	632.1
40°	600.4	598.2	590.6	588.4	588.4
42.5°	551.2	549.0	541.4	538.1	533.7
45°	494.3	492.2	484.5	477.9	479.0
47.5°	430.9	433.1	425.4	420.0	418.9
50°	375.1	374.0	367.5	364.2	359.8
52.5°	321.5	322.6	317.2	315.0	309.5
55°	278.9	278.9	275.6	271.2	269.0
57.5°	240.6	242.8	239.5	237.3	235.1
60°	208.9	210.0	210.0	205.6	205.6
62.5°	182.6	183.7	182.6	180.5	180.5
65°	161.9	163.0	160.8	159.7	158.6
67.5°	143.3	144.4	143.3	142.2	140.0
70°	126.9	126.9	125.8	125.8	123.6
72.5°	112.6	111.6	110.5	110.5	109.4
75°	97.3	96.2	95.1	95.1	93.0
77.5°	82.0	80.9	80.9	78.7	77.7
80°	65.6	65.6	64.5	63.4	62.3
82.5°	50.3	49.2	48.1	47.0	45.9
85°	31.7	32.8	31.7	30.6	29.5
87.5°	14.2	15.3	15.3	15.3	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)