

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: P688511

Luminaire Tested: SQ4R-PH1-075D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688511
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-940-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2321.8 lumens
Efficiency: N/A
Efficacy: 86.6 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

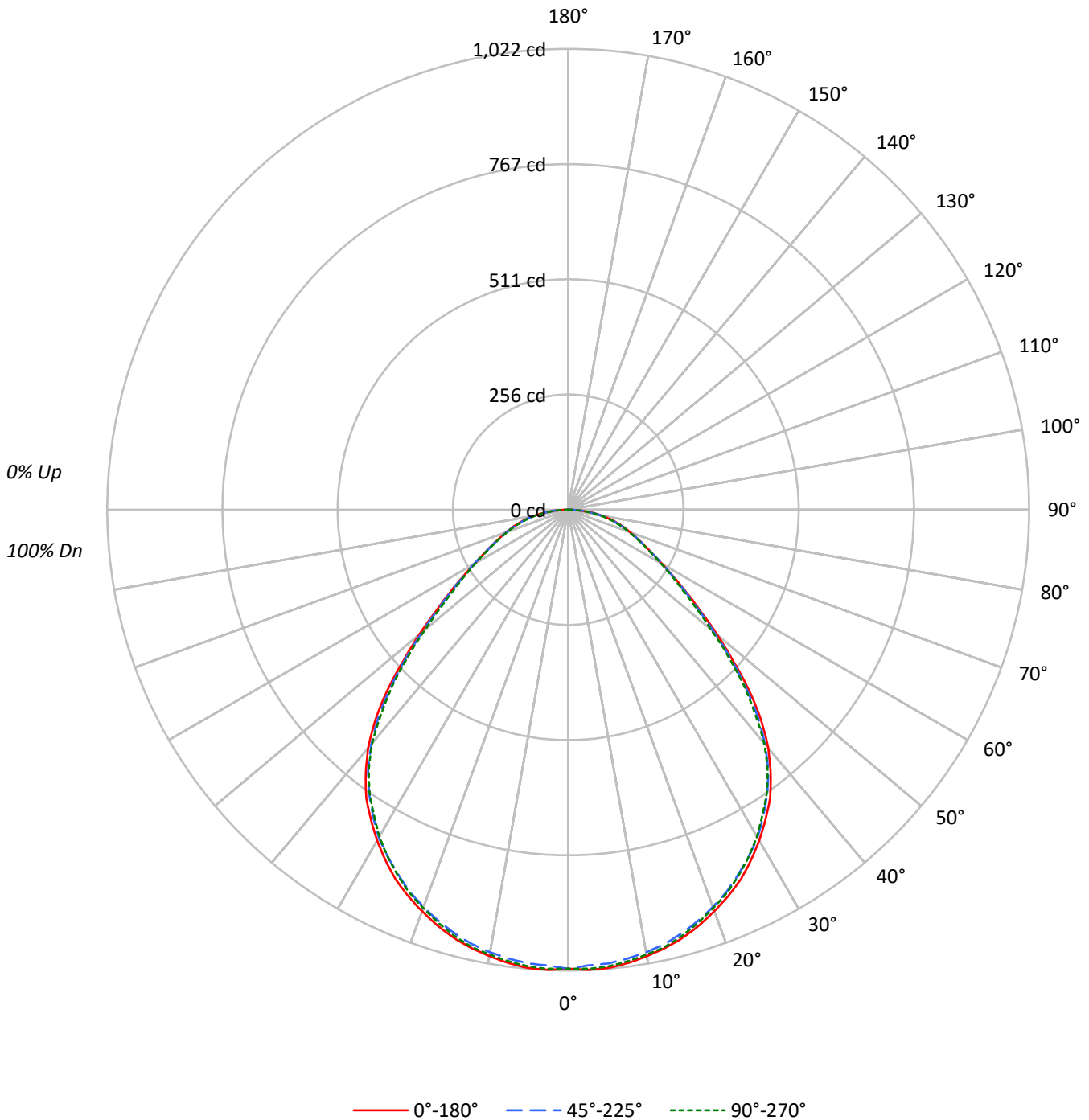
Input Watts (W): 26.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	9800	9800	9800
5°	9861	9764	9825
10°	9828	9742	9791
15°	9795	9694	9745
20°	9707	9604	9630
25°	9611	9477	9504
30°	9416	9331	9304
35°	9172	9039	9024
40°	8670	8528	8497
45°	7733	7580	7494
50°	6455	6323	6192
55°	5378	5316	5188
60°	4621	4646	4548
65°	4237	4208	4151
70°	4104	4067	3997
75°	4159	4066	3973
80°	4180	4108	3970
85°	4021	4021	3745

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7733 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	4.2
10°-20°	275.8	11.9
20°-30°	413.2	17.8
30°-40°	480.8	20.7
40°-50°	427.6	18.4
50°-60°	287.1	12.4
60°-70°	185.6	8.0
70°-80°	115.7	5.0
80°-90°	39.6	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°	785.5	33.8
0°-40°	1266.3	54.5
0°-60°	1980.9	85.3
0°-90°	2321.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2321.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1020	1018	1010	1018	1017	97
15°	983	980	973	979	978	277
25°	905	901	892	897	895	416
35°	780	777	769	769	768	485
45°	568	566	557	549	550	434
55°	320	320	317	312	309	290
65°	186	187	185	184	182	186
75°	112	111	109	109	107	118
85°	36	38	36	35	34	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1017.9	1017.9	1017.9	1017.9	1017.9
2.5°	1021.6	1019.1	1011.6	1020.4	1019.1
5°	1020.4	1017.9	1010.3	1017.9	1016.6
7.5°	1014.1	1012.8	1004.1	1012.8	1010.3
10°	1005.3	1005.3	996.5	1004.1	1001.5
12.5°	995.3	994.0	986.5	994.0	992.7
15°	982.7	980.2	972.6	978.9	977.7
17.5°	966.4	965.1	956.3	962.6	960.1
20°	947.5	945.0	937.4	942.5	940.0
22.5°	927.4	924.9	917.3	921.1	919.9
25°	904.8	901.0	892.2	897.2	894.7
27.5°	877.1	875.9	867.1	869.6	867.1
30°	847.0	845.7	839.4	839.4	836.9
32.5°	814.3	815.6	805.5	806.8	801.7
35°	780.4	776.6	769.1	769.1	767.8
37.5°	737.6	735.1	728.8	727.6	726.3
40°	689.9	687.4	678.6	676.1	676.1
42.5°	633.3	630.8	622.0	618.3	613.2
45°	568.0	565.5	556.7	549.1	550.4
47.5°	495.1	497.6	488.8	482.5	481.3
50°	431.0	429.8	422.2	418.5	413.4
52.5°	369.5	370.7	364.4	361.9	355.6
55°	320.4	320.4	316.7	311.6	309.1
57.5°	276.5	279.0	275.2	272.7	270.2
60°	240.0	241.3	241.3	236.2	236.2
62.5°	209.9	211.1	209.9	207.3	207.3
65°	186.0	187.2	184.7	183.5	182.2
67.5°	164.6	165.9	164.6	163.4	160.8
70°	145.8	145.8	144.5	144.5	142.0
72.5°	129.4	128.2	126.9	126.9	125.7
75°	111.8	110.6	109.3	109.3	106.8
77.5°	94.2	93.0	93.0	90.5	89.2
80°	75.4	75.4	74.1	72.9	71.6
82.5°	57.8	56.5	55.3	54.0	52.8
85°	36.4	37.7	36.4	35.2	33.9
87.5°	16.3	17.6	17.6	17.6	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)