

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: P688890

Luminaire Tested: SQ4R-PR1-050D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-050D-93050-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE 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: 1953.4 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

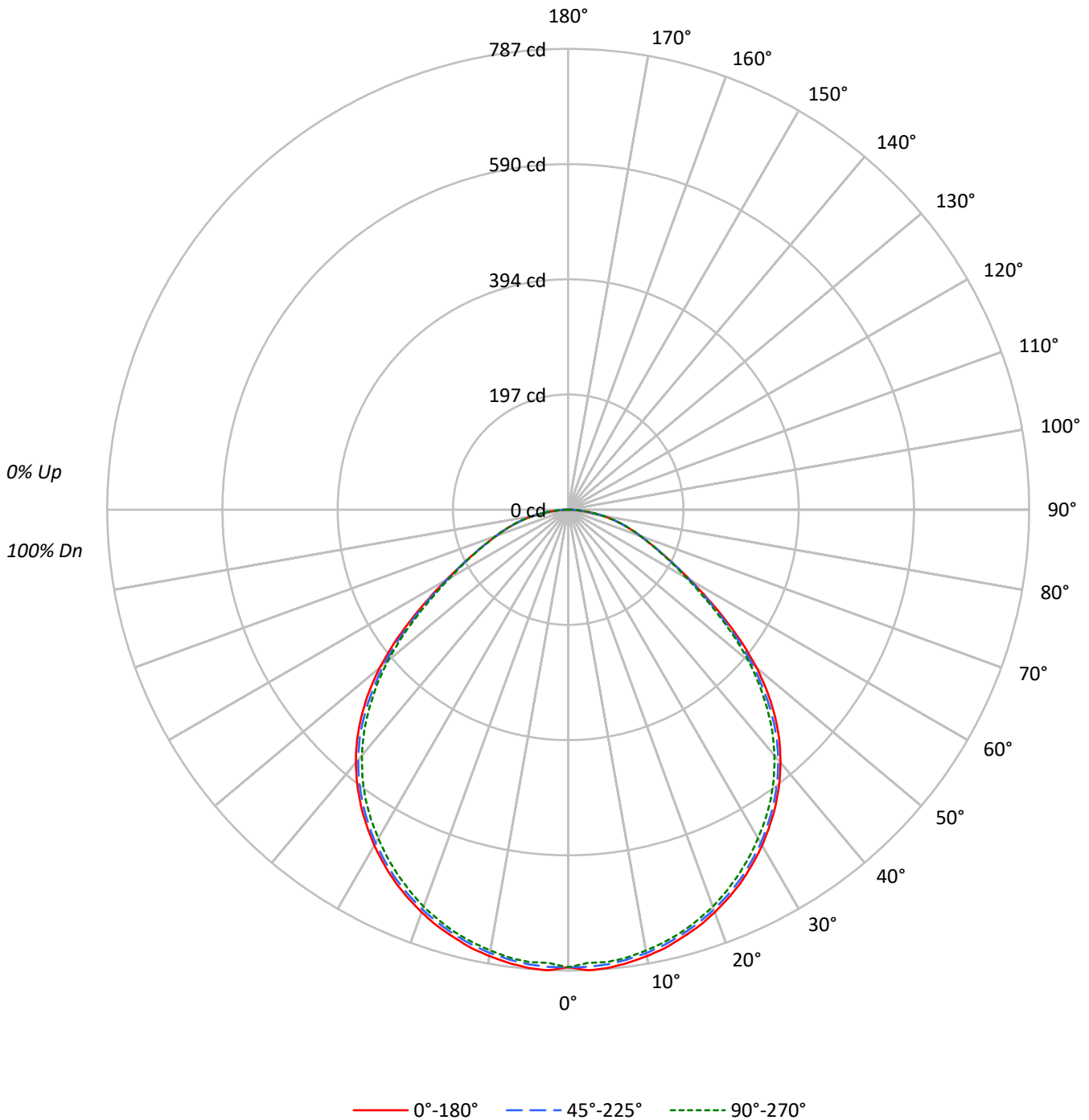
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7523	7523	7523
5°	7590	7531	7493
10°	7567	7514	7474
15°	7533	7486	7445
20°	7495	7447	7392
25°	7442	7392	7306
30°	7361	7309	7205
35°	7254	7190	7087
40°	7088	7011	6885
45°	6799	6680	6542
50°	6291	6139	6018
55°	5490	5366	5254
60°	4627	4586	4496
65°	4002	4016	3987
70°	3676	3693	3693
75°	3530	3530	3556
80°	3321	3360	3321
85°	2673	2971	2971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6799 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	3.8
10°-20°	211.5	10.8
20°-30°	319.0	16.3
30°-40°	380.2	19.5
40°-50°	375.1	19.2
50°-60°	286.1	14.6
60°-70°	176.6	9.0
70°-80°	100.6	5.2
80°-90°	30.4	1.6
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°	604.5	30.9
0°-40°	984.7	50.4
0°-60°	1645.8	84.3
0°-90°	1953.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1953.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	781	781	781	781	781	
5°	785	777	779	777	775	75
15°	756	748	751	748	747	213
25°	701	692	696	688	688	323
35°	617	610	612	604	603	385
45°	499	493	491	482	480	383
55°	327	322	320	314	313	293
65°	176	174	176	175	175	177
75°	95	95	95	96	96	100
85°	24	26	27	27	27	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.4	781.4	781.4	781.4	781.4
2.5°	787.4	778.7	781.4	779.3	774.6
5°	785.4	776.7	779.3	776.7	775.3
7.5°	780.7	771.9	774.6	771.9	771.3
10°	774.0	765.9	768.6	765.9	764.5
12.5°	766.6	757.8	761.2	757.8	756.5
15°	755.8	747.7	751.1	748.4	747.0
17.5°	745.0	736.3	739.6	736.9	734.9
20°	731.6	723.5	726.9	722.1	721.5
22.5°	716.8	708.7	712.0	705.3	705.3
25°	700.6	691.9	695.9	688.5	687.8
27.5°	681.8	673.7	677.1	669.6	669.0
30°	662.2	654.2	657.5	649.5	648.1
32.5°	640.0	632.6	635.3	627.2	626.6
35°	617.2	609.8	611.8	603.7	603.0
37.5°	591.6	584.8	586.2	577.4	576.8
40°	564.0	557.3	557.9	548.5	547.8
42.5°	533.7	527.0	526.3	516.9	516.2
45°	499.4	492.6	490.6	481.9	480.5
47.5°	461.7	455.0	450.9	443.5	442.8
50°	420.0	413.2	409.9	403.8	401.8
52.5°	374.9	368.1	365.4	360.1	358.0
55°	327.1	321.7	319.7	314.3	313.0
57.5°	281.3	277.3	276.6	271.2	270.6
60°	240.3	238.2	238.2	233.5	233.5
62.5°	205.3	203.9	205.3	202.6	201.9
65°	175.7	174.3	176.3	175.0	175.0
67.5°	150.8	150.8	152.1	151.4	151.4
70°	130.6	130.6	131.2	131.2	131.2
72.5°	112.4	111.7	113.7	113.7	113.1
75°	94.9	94.9	94.9	95.6	95.6
77.5°	77.4	77.4	78.1	78.1	77.4
80°	59.9	60.6	60.6	59.9	59.9
82.5°	42.4	43.1	43.1	43.1	42.4
85°	24.2	25.6	26.9	26.9	26.9
87.5°	8.7	11.4	13.5	13.5	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)