

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: P688538

Luminaire Tested: SQ4R-PP3-050D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PP3-050D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2043.6 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

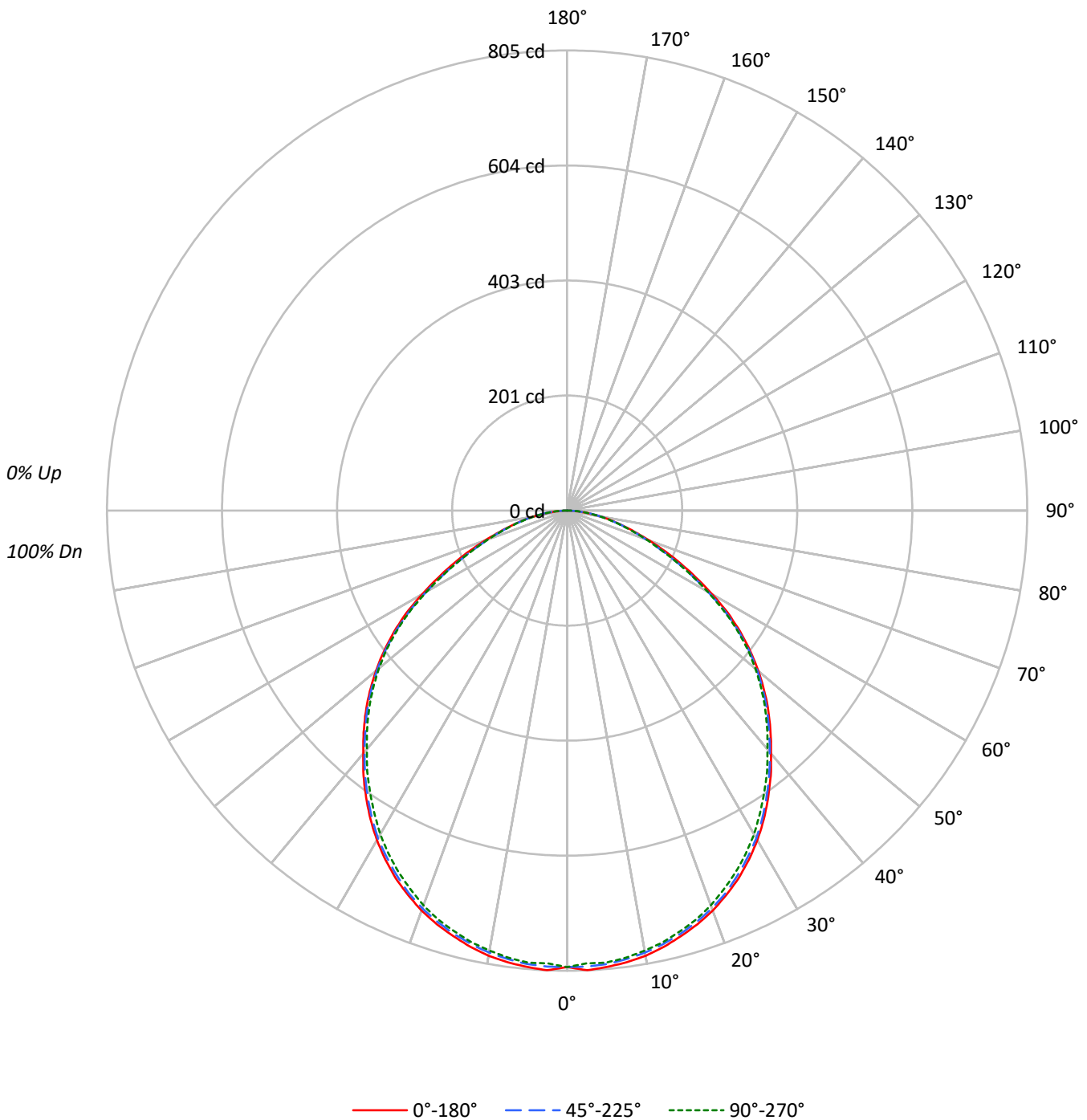
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56		66	60	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		49	43	38		48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34		45	39	34		44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7687	7687	7687
5°	7744	7697	7669
10°	7731	7676	7642
15°	7680	7638	7596
20°	7629	7586	7528
25°	7538	7486	7411
30°	7398	7359	7266
35°	7204	7155	7065
40°	6974	6930	6851
45°	6784	6737	6670
50°	6541	6499	6436
55°	6202	6120	6073
60°	5645	5484	5457
65°	4973	4766	4750
70°	4295	4118	4118
75°	3697	3645	3593
80°	3260	3299	3221
85°	2552	2784	2784

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6784 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	3.7
10°-20°	215.7	10.6
20°-30°	323.1	15.8
30°-40°	378.9	18.5
40°-50°	380.1	18.6
50°-60°	324.6	15.9
60°-70°	210.9	10.3
70°-80°	105.7	5.2
80°-90°	29.0	1.4
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°	614.4	30.1
0°-40°	993.3	48.6
0°-60°	1698.0	83.1
0°-90°	2043.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	801	794	796	794	794	76
15°	770	763	766	764	762	217
25°	710	701	705	698	698	327
35°	613	607	609	602	601	383
45°	498	495	495	490	490	384
55°	370	368	365	362	362	329
65°	218	214	209	208	208	218
75°	99	99	98	97	97	107
85°	23	25	25	25	25	27
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.5	798.5	798.5	798.5	798.5
2.5°	804.8	796.4	798.5	797.1	792.9
5°	801.3	793.6	796.4	793.6	793.6
7.5°	797.1	788.7	791.5	788.7	788.7
10°	790.8	782.4	785.2	782.4	781.7
12.5°	781.7	773.3	776.8	773.3	773.3
15°	770.5	762.8	766.3	763.5	762.1
17.5°	758.6	750.2	754.4	750.9	750.2
20°	744.6	736.2	740.4	734.8	734.8
22.5°	727.8	719.4	724.3	716.6	716.6
25°	709.6	701.2	704.7	698.4	697.7
27.5°	688.6	680.2	683.7	676.7	676.7
30°	665.5	657.8	662.0	654.3	653.6
32.5°	640.3	633.3	636.1	628.4	627.7
35°	613.0	606.7	608.8	601.8	601.1
37.5°	585.0	578.0	580.8	574.5	574.5
40°	554.9	550.7	551.4	546.5	545.1
42.5°	526.9	522.0	522.7	517.9	517.9
45°	498.3	494.8	494.8	489.9	489.9
47.5°	468.2	465.4	464.7	460.5	460.5
50°	436.7	434.6	433.9	430.4	429.7
52.5°	403.8	403.1	400.3	397.5	397.5
55°	369.5	368.1	364.6	362.5	361.8
57.5°	333.1	330.3	326.8	323.3	324.0
60°	293.2	290.4	284.8	283.4	283.4
62.5°	254.7	251.2	245.6	243.5	244.9
65°	218.3	214.1	209.2	207.8	208.5
67.5°	184.7	180.5	174.9	174.9	174.2
70°	152.6	150.5	146.3	146.3	146.3
72.5°	123.9	123.2	120.4	120.4	119.7
75°	99.4	99.4	98.0	97.3	96.6
77.5°	78.4	78.4	77.7	77.0	75.6
80°	58.8	60.2	59.5	58.8	58.1
82.5°	40.6	42.0	42.0	40.6	40.6
85°	23.1	25.2	25.2	25.2	25.2
87.5°	7.7	10.5	11.2	11.2	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)