

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: P689006

Luminaire Tested: SQ4R-PW1-125D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P689006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-125D-93050-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5042.4 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

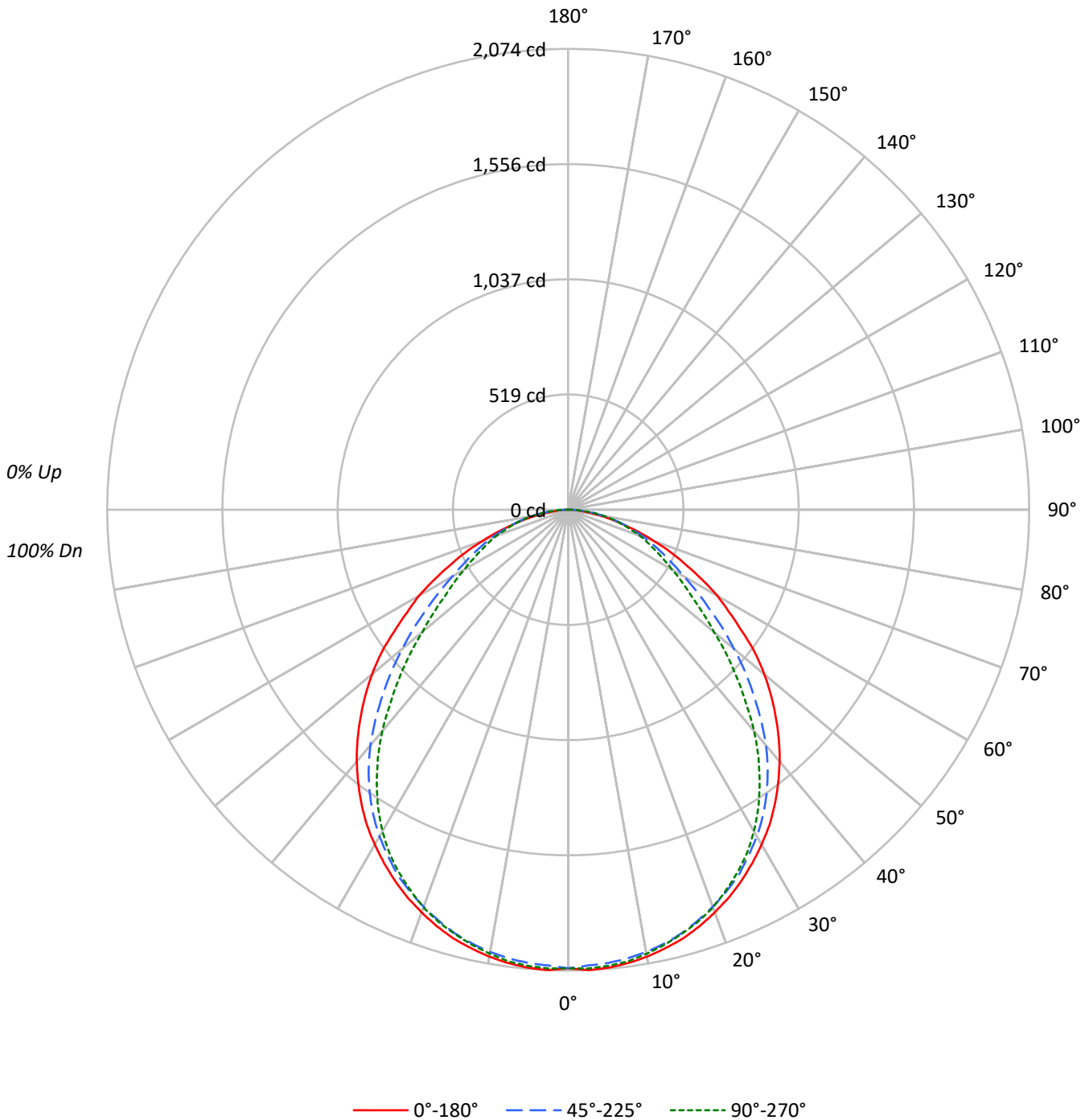
Input Watts (W): 61.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	99	96	93		95	92	90		91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78		84	80	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		75	69	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	59	50	44	57	49	44		55	49	44		54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19868	19868	19868
5°	19995	19790	19919
10°	19967	19760	19837
15°	19908	19670	19697
20°	19757	19485	19513
25°	19584	19274	19132
30°	19344	18873	18577
35°	19048	18300	17646
40°	18601	17402	16368
45°	17986	16071	14663
50°	17242	14581	12833
55°	16028	12956	11353
60°	14915	11593	10419
65°	13233	10757	9850
70°	11499	10229	9706
75°	9470	9671	9273
80°	7501	9120	9120
85°	5567	8207	8494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17986 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	3.9
10°-20°	559.3	11.1
20°-30°	837.7	16.6
30°-40°	973.3	19.3
40°-50°	918.3	18.2
50°-60°	716.4	14.2
60°-70°	486.4	9.6
70°-80°	273.9	5.4
80°-90°	81.3	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°	1592.7	31.6
0°-40°	2566.0	50.9
0°-60°	4200.8	83.3
0°-90°	5042.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5042.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2069	2064	2048	2064	2061	197
15°	1997	1989	1974	1984	1976	563
25°	1844	1836	1814	1809	1801	849
35°	1621	1605	1557	1523	1501	1012
45°	1321	1281	1180	1106	1077	1019
55°	955	899	772	698	676	858
65°	581	528	472	443	432	580
75°	255	265	260	249	249	277
85°	50	72	74	74	77	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2063.7	2063.7	2063.7	2063.7	2063.7
2.5°	2074.3	2069.0	2053.1	2069.0	2066.4
5°	2069.0	2063.7	2047.8	2063.7	2061.1
7.5°	2058.4	2055.8	2037.2	2053.1	2050.5
10°	2042.5	2039.8	2021.3	2034.5	2029.2
12.5°	2021.3	2018.6	2000.1	2010.7	2005.4
15°	1997.4	1989.4	1973.5	1984.1	1976.2
17.5°	1965.6	1957.6	1939.0	1947.0	1944.4
20°	1928.4	1920.5	1901.9	1909.9	1904.6
22.5°	1888.6	1880.7	1859.5	1862.1	1854.2
25°	1843.6	1835.6	1814.4	1809.1	1801.1
27.5°	1793.2	1787.9	1756.0	1750.7	1742.8
30°	1740.1	1732.1	1697.7	1687.1	1671.1
32.5°	1684.4	1668.5	1631.3	1610.1	1591.6
35°	1620.7	1604.8	1557.1	1522.6	1501.4
37.5°	1551.8	1527.9	1474.8	1427.1	1405.9
40°	1480.1	1453.6	1384.7	1321.0	1302.4
42.5°	1403.2	1371.4	1283.9	1217.5	1185.7
45°	1321.0	1281.2	1180.4	1106.1	1077.0
47.5°	1238.8	1188.4	1079.6	1000.0	968.2
50°	1151.2	1090.2	973.5	888.6	856.8
52.5°	1061.0	994.7	875.4	787.8	763.9
55°	954.9	899.2	771.9	697.6	676.4
57.5°	859.4	798.4	687.0	623.4	607.4
60°	774.6	700.3	602.1	554.4	541.1
62.5°	676.4	610.1	533.2	496.0	482.8
65°	580.9	527.9	472.2	443.0	432.4
67.5°	498.7	453.6	416.5	392.6	387.3
70°	408.5	384.6	363.4	344.8	344.8
72.5°	331.6	323.6	310.4	299.7	291.8
75°	254.6	265.3	260.0	249.3	249.3
77.5°	193.6	209.6	212.2	206.9	209.6
80°	135.3	159.2	164.5	161.8	164.5
82.5°	84.9	114.1	119.4	119.4	122.0
85°	50.4	71.6	74.3	74.3	76.9
87.5°	21.2	34.5	37.1	37.1	37.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)