

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: P688772

Luminaire Tested: SQ4R-PH1-125D-93050-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688772
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-PH1-125D-93050-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX 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: 4987.3 lumens
Efficiency: N/A
Efficacy: 81.2 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

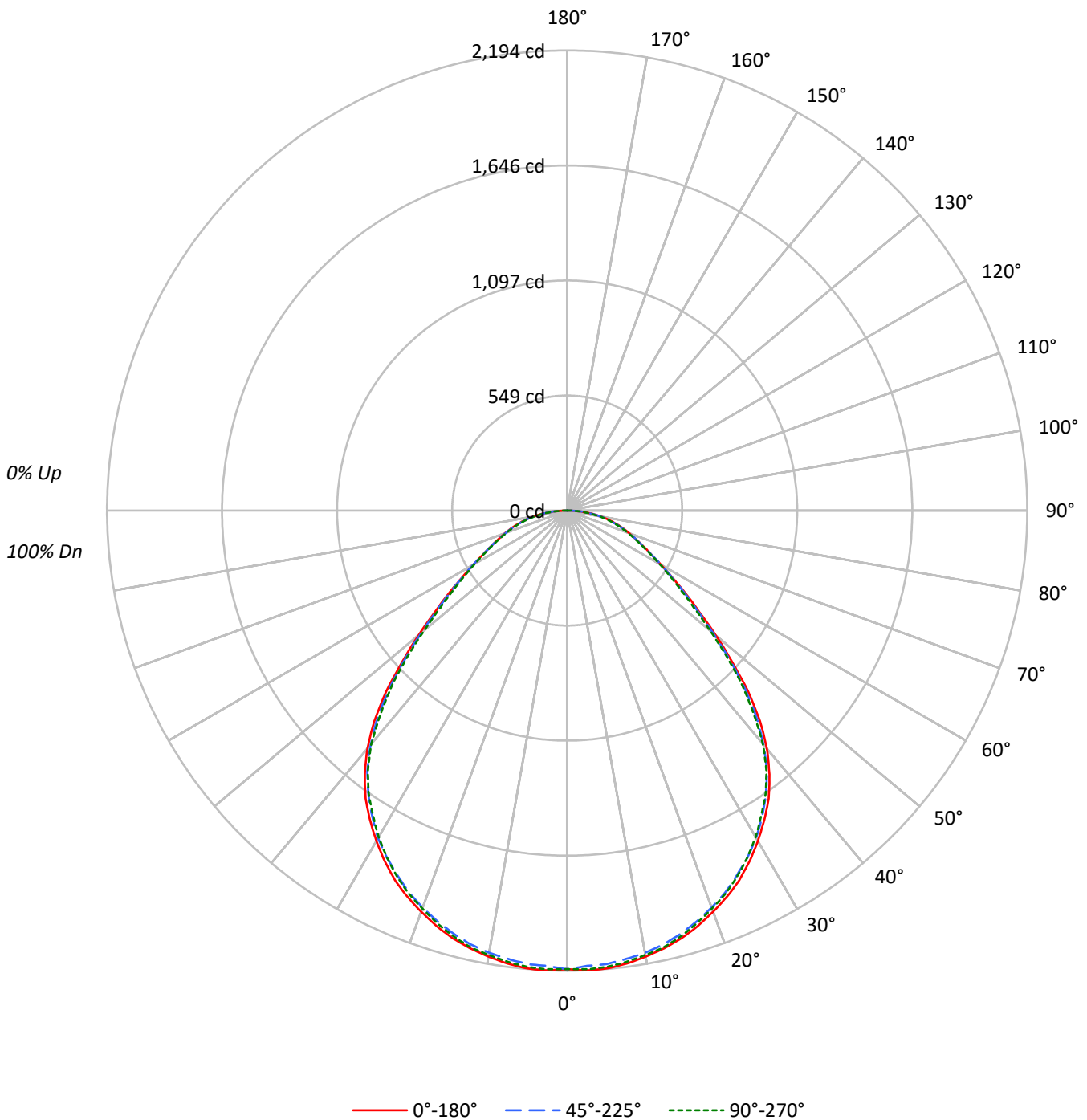
Input Watts (W): 61.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55				55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21049	21049	21049
5°	21182	20973	21104
10°	21110	20925	21031
15°	21038	20823	20931
20°	20851	20630	20685
25°	20644	20357	20415
30°	20225	20045	19984
35°	19700	19414	19383
40°	18624	18319	18251
45°	16610	16281	16097
50°	13866	13583	13300
55°	11553	11417	11145
60°	9928	9978	9772
65°	9101	9039	8916
70°	8813	8737	8585
75°	8935	8734	8533
80°	8982	8832	8532
85°	8649	8649	8053

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16610 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.4	4.2
10°-20°	592.4	11.9
20°-30°	887.5	17.8
30°-40°	1032.6	20.7
40°-50°	918.4	18.4
50°-60°	616.7	12.4
60°-70°	398.6	8.0
70°-80°	248.4	5.0
80°-90°	85.2	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°	1687.2	33.8
0°-40°	2719.9	54.5
0°-60°	4255.0	85.3
0°-90°	4987.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4987.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2186	2186	2186	2186	2186	
5°	2192	2186	2170	2186	2184	208
15°	2111	2105	2089	2103	2100	595
25°	1943	1935	1916	1927	1922	894
35°	1676	1668	1652	1652	1649	1042
45°	1220	1215	1196	1180	1182	933
55°	688	688	680	669	664	624
65°	400	402	397	394	391	400
75°	240	238	235	235	229	253
85°	78	81	78	76	73	87
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2186.4	2186.4	2186.4	2186.4	2186.4
2.5°	2194.5	2189.1	2172.9	2191.8	2189.1
5°	2191.8	2186.4	2170.2	2186.4	2183.7
7.5°	2178.3	2175.6	2156.7	2175.6	2170.2
10°	2159.4	2159.4	2140.5	2156.7	2151.3
12.5°	2137.8	2135.1	2118.9	2135.1	2132.4
15°	2110.8	2105.4	2089.2	2102.7	2100.0
17.5°	2075.7	2073.0	2054.1	2067.6	2062.2
20°	2035.2	2029.8	2013.6	2024.4	2019.0
22.5°	1992.0	1986.6	1970.4	1978.5	1975.8
25°	1943.4	1935.3	1916.4	1927.2	1921.8
27.5°	1884.1	1881.4	1862.5	1867.9	1862.5
30°	1819.3	1816.6	1803.1	1803.1	1797.7
32.5°	1749.1	1751.8	1730.2	1732.9	1722.1
35°	1676.2	1668.1	1651.9	1651.9	1649.2
37.5°	1584.4	1579.0	1565.5	1562.8	1560.1
40°	1481.9	1476.5	1457.6	1452.2	1452.2
42.5°	1360.4	1355.0	1336.1	1328.0	1317.2
45°	1220.0	1214.6	1195.8	1179.6	1182.3
47.5°	1063.5	1068.9	1050.0	1036.5	1033.8
50°	925.8	923.1	906.9	898.8	888.0
52.5°	793.6	796.3	782.8	777.4	763.9
55°	688.3	688.3	680.2	669.4	664.0
57.5°	593.8	599.2	591.1	585.7	580.3
60°	515.6	518.2	518.2	507.5	507.5
62.5°	450.8	453.5	450.8	445.4	445.4
65°	399.5	402.2	396.8	394.1	391.4
67.5°	353.6	356.3	353.6	350.9	345.5
70°	313.1	313.1	310.4	310.4	305.0
72.5°	278.0	275.3	272.6	272.6	269.9
75°	240.2	237.5	234.8	234.8	229.4
77.5°	202.4	199.7	199.7	194.3	191.6
80°	162.0	162.0	159.3	156.6	153.9
82.5°	124.2	121.5	118.8	116.1	113.4
85°	78.3	81.0	78.3	75.6	72.9
87.5°	35.1	37.8	37.8	37.8	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)