

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: P688518

Luminaire Tested: SQ4R-PH1-125D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688518
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-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4444.2 lumens
Efficiency: N/A
Efficacy: 89.8 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

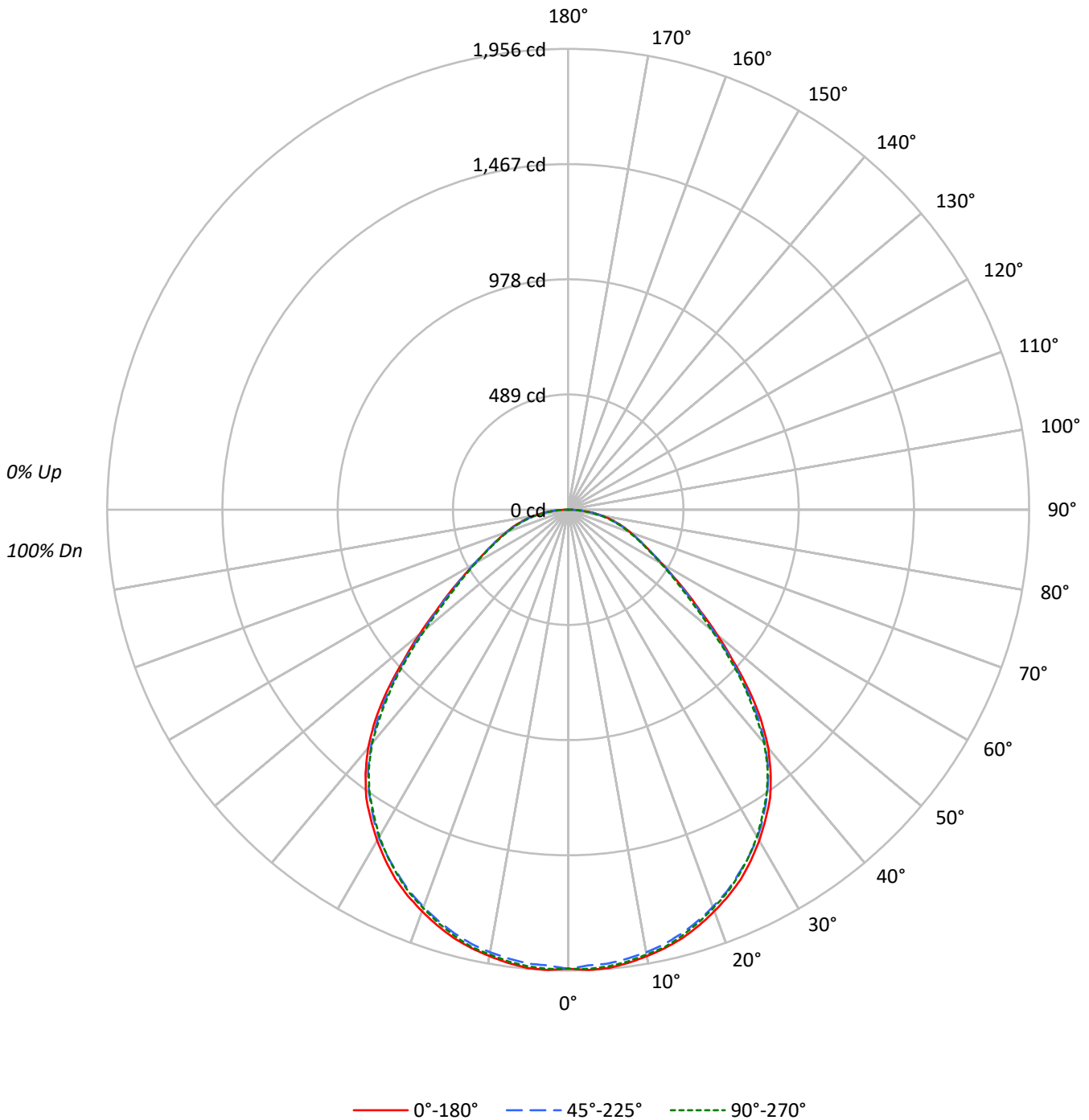
Input Watts (W): 49.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	18757	18757	18757
5°	18875	18689	18805
10°	18811	18646	18740
15°	18748	18555	18651
20°	18581	18384	18433
25°	18396	18141	18192
30°	18022	17861	17808
35°	17555	17301	17272
40°	16596	16324	16264
45°	14802	14508	14344
50°	12356	12105	11852
55°	10296	10173	9932
60°	8846	8892	8707
65°	8110	8055	7946
70°	7853	7786	7651
75°	7964	7785	7607
80°	8000	7867	7601
85°	7710	7710	7169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14802 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	4.2
10°-20°	527.9	11.9
20°-30°	790.9	17.8
30°-40°	920.2	20.7
40°-50°	818.4	18.4
50°-60°	549.5	12.4
60°-70°	355.2	8.0
70°-80°	221.4	5.0
80°-90°	75.9	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°	1503.5	33.8
0°-40°	2423.7	54.5
0°-60°	3791.7	85.3
0°-90°	4444.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4444.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1948	1948	1948	1948	1948	
5°	1953	1948	1934	1948	1946	185
15°	1881	1876	1862	1874	1871	530
25°	1732	1725	1708	1717	1713	796
35°	1494	1486	1472	1472	1470	928
45°	1087	1082	1066	1051	1054	831
55°	613	613	606	596	592	556
65°	356	358	354	351	349	357
75°	214	212	209	209	204	225
85°	70	72	70	67	65	77
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1948.3	1948.3	1948.3	1948.3	1948.3
2.5°	1955.5	1950.7	1936.3	1953.1	1950.7
5°	1953.1	1948.3	1933.9	1948.3	1945.9
7.5°	1941.1	1938.7	1921.8	1938.7	1933.9
10°	1924.2	1924.2	1907.4	1921.8	1917.0
12.5°	1905.0	1902.6	1888.2	1902.6	1900.2
15°	1881.0	1876.1	1861.7	1873.7	1871.3
17.5°	1849.7	1847.3	1830.4	1842.5	1837.7
20°	1813.6	1808.8	1794.4	1804.0	1799.2
22.5°	1775.1	1770.3	1755.9	1763.1	1760.7
25°	1731.8	1724.6	1707.8	1717.4	1712.6
27.5°	1678.9	1676.5	1659.7	1664.5	1659.7
30°	1621.2	1618.8	1606.7	1606.7	1601.9
32.5°	1558.6	1561.0	1541.8	1544.2	1534.6
35°	1493.7	1486.5	1472.1	1472.1	1469.6
37.5°	1411.9	1407.1	1395.1	1392.7	1390.3
40°	1320.5	1315.7	1298.9	1294.1	1294.1
42.5°	1212.3	1207.5	1190.6	1183.4	1173.8
45°	1087.2	1082.4	1065.6	1051.1	1053.5
47.5°	947.7	952.5	935.7	923.6	921.2
50°	825.0	822.6	808.2	801.0	791.3
52.5°	707.2	709.6	697.5	692.7	680.7
55°	613.4	613.4	606.1	596.5	591.7
57.5°	529.2	534.0	526.8	522.0	517.1
60°	459.4	461.8	461.8	452.2	452.2
62.5°	401.7	404.1	401.7	396.9	396.9
65°	356.0	358.4	353.6	351.2	348.8
67.5°	315.1	317.5	315.1	312.7	307.9
70°	279.0	279.0	276.6	276.6	271.8
72.5°	247.7	245.3	242.9	242.9	240.5
75°	214.1	211.7	209.3	209.3	204.5
77.5°	180.4	178.0	178.0	173.2	170.8
80°	144.3	144.3	141.9	139.5	137.1
82.5°	110.6	108.2	105.8	103.4	101.0
85°	69.8	72.2	69.8	67.3	64.9
87.5°	31.3	33.7	33.7	33.7	31.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)