

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: P688519

Luminaire Tested: SQ4R-PH1-125D-835-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688519
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4546.6 lumens
Efficiency: N/A
Efficacy: 91.9 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

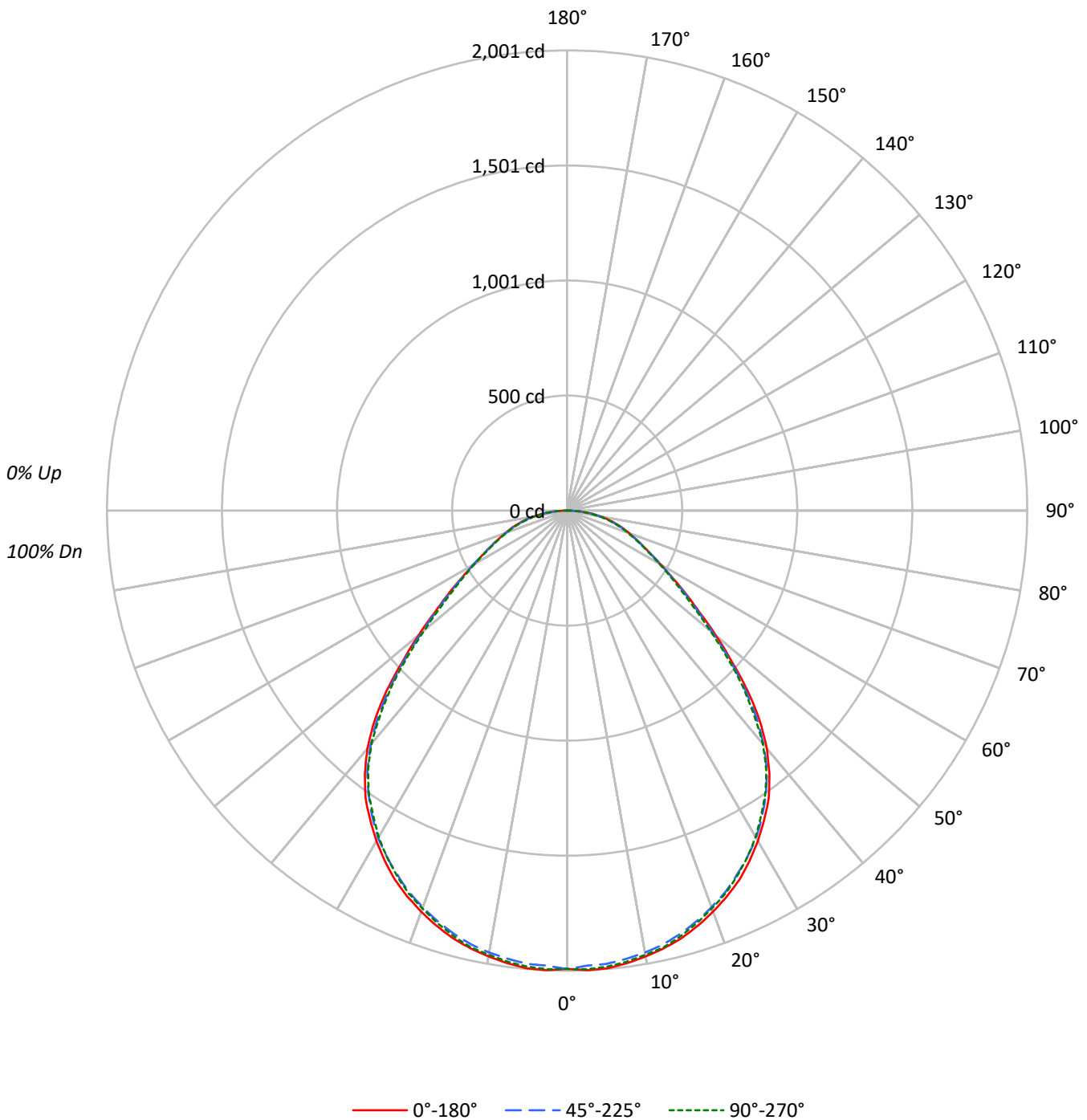
Input Watts (W): 49.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688519

CATALOG NUMBER: SQ4R-PH1-125D-835-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P688519

CATALOG NUMBER: SQ4R-PH1-125D-835-1-UNV-STD-W-4

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°	19189	19189	19189
5°	19310	19119	19238
10°	19245	19077	19172
15°	19179	18983	19082
20°	19009	18807	18857
25°	18820	18559	18611
30°	18437	18274	18219
35°	17959	17700	17670
40°	16978	16700	16638
45°	15144	14842	14674
50°	12641	12383	12126
55°	10532	10408	10160
60°	9050	9098	8907
65°	8297	8240	8128
70°	8034	7966	7828
75°	8146	7964	7782
80°	8183	8050	7778
85°	7887	7887	7335

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15144 cd/sqm

TEST NUMBER: P688519

CATALOG NUMBER: SQ4R-PH1-125D-835-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	4.2
10°-20°	540.1	11.9
20°-30°	809.1	17.8
30°-40°	941.4	20.7
40°-50°	837.3	18.4
50°-60°	562.2	12.4
60°-70°	363.4	8.0
70°-80°	226.5	5.0
80°-90°	77.6	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°	1538.2	33.8
0°-40°	2479.6	54.5
0°-60°	3879.1	85.3
0°-90°	4546.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4546.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1993	1993	1993	1993	1993	
5°	1998	1993	1978	1993	1991	190
15°	1924	1919	1905	1917	1914	542
25°	1772	1764	1747	1757	1752	815
35°	1528	1521	1506	1506	1504	950
45°	1112	1107	1090	1075	1078	850
55°	628	628	620	610	605	569
65°	364	367	362	359	357	365
75°	219	216	214	214	209	231
85°	71	74	71	69	66	79
90°	0	0	0	0	0	

TEST NUMBER: P688519

CATALOG NUMBER: SQ4R-PH1-125D-835-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1993.2	1993.2	1993.2	1993.2	1993.2
2.5°	2000.6	1995.7	1980.9	1998.1	1995.7
5°	1998.1	1993.2	1978.4	1993.2	1990.7
7.5°	1985.8	1983.4	1966.1	1983.4	1978.4
10°	1968.6	1968.6	1951.4	1966.1	1961.2
12.5°	1948.9	1946.4	1931.7	1946.4	1944.0
15°	1924.3	1919.4	1904.6	1916.9	1914.5
17.5°	1892.3	1889.8	1872.6	1884.9	1880.0
20°	1855.4	1850.5	1835.7	1845.6	1840.6
22.5°	1816.0	1811.1	1796.3	1803.7	1801.3
25°	1771.7	1764.4	1747.1	1757.0	1752.0
27.5°	1717.6	1715.1	1697.9	1702.8	1697.9
30°	1658.5	1656.1	1643.8	1643.8	1638.9
32.5°	1594.6	1597.0	1577.3	1579.8	1570.0
35°	1528.1	1520.7	1506.0	1506.0	1503.5
37.5°	1444.5	1439.5	1427.2	1424.8	1422.3
40°	1350.9	1346.0	1328.8	1323.9	1323.9
42.5°	1240.2	1235.3	1218.1	1210.7	1200.8
45°	1112.3	1107.3	1090.1	1075.3	1077.8
47.5°	969.5	974.5	957.2	944.9	942.5
50°	844.0	841.6	826.8	819.4	809.6
52.5°	723.5	725.9	713.6	708.7	696.4
55°	627.5	627.5	620.1	610.3	605.3
57.5°	541.4	546.3	538.9	534.0	529.1
60°	470.0	472.5	472.5	462.6	462.6
62.5°	410.9	413.4	410.9	406.0	406.0
65°	364.2	366.7	361.7	359.3	356.8
67.5°	322.4	324.8	322.4	319.9	315.0
70°	285.4	285.4	283.0	283.0	278.1
72.5°	253.5	251.0	248.5	248.5	246.1
75°	219.0	216.5	214.1	214.1	209.2
77.5°	184.6	182.1	182.1	177.2	174.7
80°	147.6	147.6	145.2	142.7	140.3
82.5°	113.2	110.7	108.3	105.8	103.4
85°	71.4	73.8	71.4	68.9	66.4
87.5°	32.0	34.5	34.5	34.5	32.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)