

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: P845586

Luminaire Tested: SQ2R-PH1-125D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-10)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PH1-125D-930-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS
1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

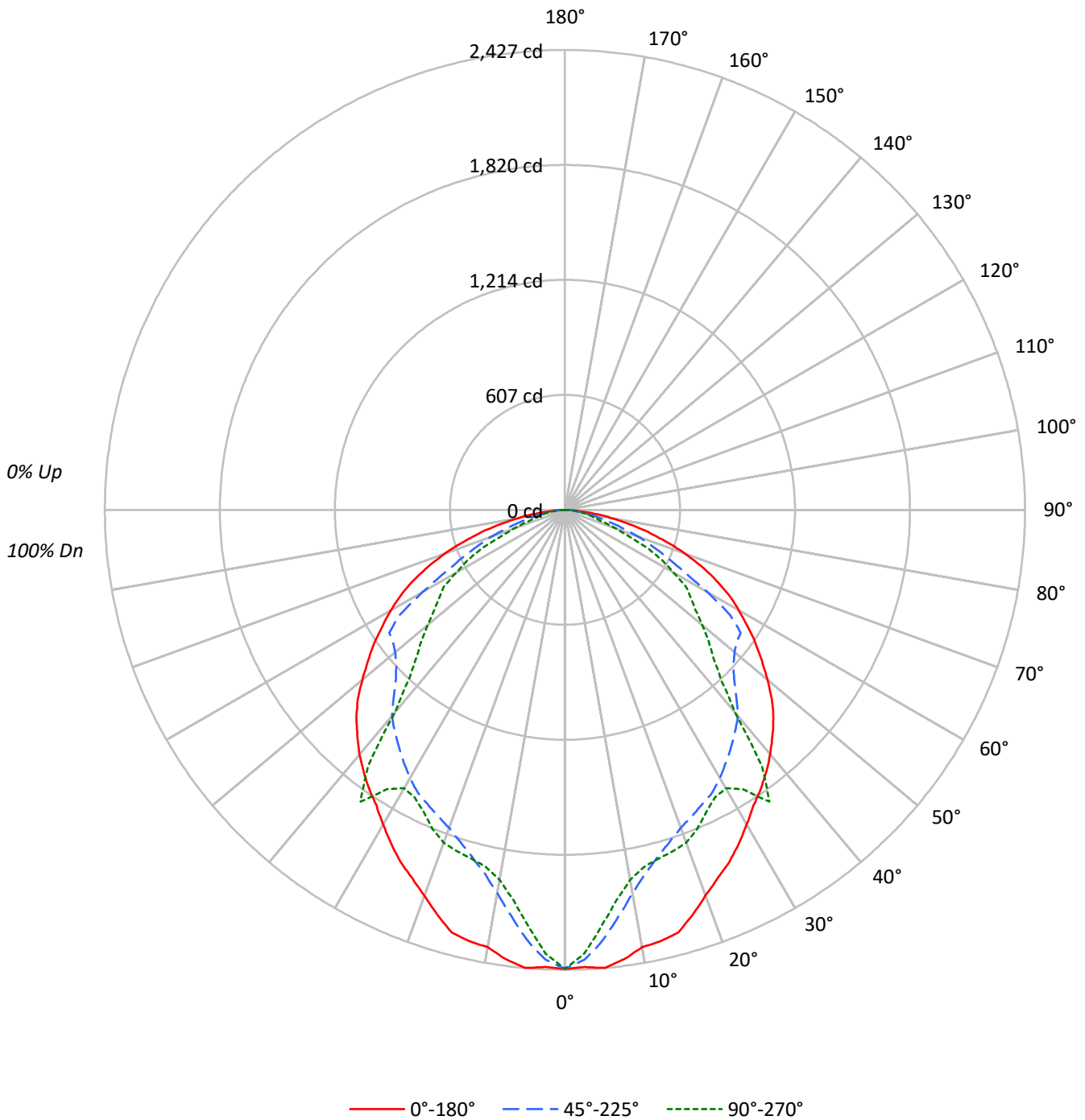
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5350.9 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.03 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9979
Total Harmonic Distortion (THDi): 0.0523
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85				85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72				72
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61				61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53				53
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46				46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40				40
7	66	53	45	39	65	52	44	38	51	44	38	49	43	38	48	42	38	36				36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32				32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29				29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26				26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39105	39105	39105
5°	39329	36976	35744
10°	38423	33664	32491
15°	38598	31664	31856
20°	37220	30687	32112
25°	36538	30544	31365
30°	35745	30462	31621
35°	35475	30116	37063
40°	35506	29921	29385
45°	35518	28782	25309
50°	35020	29348	23732
55°	34576	31851	22770
60°	34232	27906	21358
65°	33631	22625	18575
70°	31766	19256	13270
75°	28322	14523	10062
80°	23143	9428	9428
85°	14524	8540	6410

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 35518 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.7	4.0
10°-20°	560.1	10.5
20°-30°	821.5	15.4
30°-40°	995.7	18.6
40°-50°	978.2	18.3
50°-60°	852.2	15.9
60°-70°	590.8	11.0
70°-80°	278.8	5.2
80°-90°	60.0	1.1
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°	1595.3	29.8
0°-40°	2591.0	48.4
0°-60°	4421.3	82.6
0°-90°	5350.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5350.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2422	2422	2422	2422	2422	
5°	2427	2424	2281	2210	2205	229
15°	2309	2051	1894	1880	1906	645
25°	2051	1738	1714	1768	1761	944
35°	1800	1447	1528	1655	1880	1127
45°	1556	1143	1260	1309	1108	1197
55°	1228	890	1132	816	809	1097
65°	880	611	592	486	486	866
75°	454	311	233	166	161	480
85°	78	51	46	37	35	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2422.0	2422.0	2422.0	2422.0	2422.0
2.5°	2415.1	2447.3	2375.9	2348.3	2343.6
5°	2426.6	2424.3	2281.4	2210.0	2205.4
7.5°	2392.0	2329.8	2163.9	2083.2	2078.6
10°	2343.6	2235.3	2053.3	1981.8	1981.8
12.5°	2332.1	2145.5	1963.4	1915.0	1928.8
15°	2309.1	2051.0	1894.3	1880.4	1905.8
17.5°	2239.9	1961.1	1836.7	1859.7	1889.7
20°	2166.2	1892.0	1786.0	1841.3	1868.9
22.5°	2104.0	1825.1	1749.1	1811.3	1822.8
25°	2051.0	1737.6	1714.5	1767.5	1760.6
27.5°	1986.4	1659.2	1682.3	1714.5	1712.2
30°	1917.3	1590.1	1633.9	1666.1	1696.1
32.5°	1850.5	1509.4	1580.9	1668.4	1746.8
35°	1799.8	1447.2	1527.9	1654.6	1880.4
37.5°	1744.5	1371.2	1474.9	1576.3	1707.6
40°	1684.6	1288.2	1419.6	1560.1	1394.2
42.5°	1620.0	1223.7	1336.6	1530.2	1221.4
45°	1555.5	1143.0	1260.5	1308.9	1108.4
47.5°	1481.8	1083.1	1205.2	1113.1	1027.8
50°	1394.2	1023.2	1168.4	995.5	944.8
52.5°	1308.9	961.0	1143.0	898.7	868.8
55°	1228.3	889.5	1131.5	815.8	808.9
57.5°	1140.7	818.1	1034.7	739.7	758.2
60°	1060.1	749.0	864.2	675.2	661.4
62.5°	974.8	682.1	705.2	592.2	578.4
65°	880.3	610.7	592.2	486.2	486.2
67.5°	778.9	536.9	497.8	419.4	359.5
70°	672.9	465.5	407.9	318.0	281.1
72.5°	560.0	389.5	315.7	246.6	202.8
75°	454.0	311.1	232.8	165.9	161.3
77.5°	348.0	237.4	170.5	129.1	129.1
80°	248.9	170.5	101.4	99.1	101.4
82.5°	156.7	103.7	69.1	73.7	73.7
85°	78.4	50.7	46.1	36.9	34.6
87.5°	20.7	18.4	11.5	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	23.88	25.47	24.24	25.78	26.09	22.59	24.18	22.95	24.49	24.80
	3H	25.96	27.39	26.33	27.71	28.07	23.67	25.10	24.05	25.43	25.79
	4H	26.72	28.07	27.12	28.42	28.79	23.92	25.26	24.32	25.61	25.99
	6H	27.25	28.49	27.66	28.85	29.25	24.10	25.34	24.51	25.71	26.10
	8H	27.39	28.58	27.82	28.97	29.37	24.15	25.34	24.58	25.73	26.13
	12H	27.46	28.60	27.89	28.98	29.41	24.17	25.31	24.60	25.69	26.12
4H	2H	24.34	25.69	24.74	26.03	26.41	23.31	24.66	23.71	25.00	25.38
	3H	26.51	27.63	26.92	28.03	28.43	24.56	25.68	24.97	26.07	26.48
	4H	27.36	28.36	27.79	28.78	29.22	24.86	25.87	25.29	26.28	26.72
	6H	27.98	28.86	28.44	29.30	29.76	25.11	25.99	25.57	26.43	26.89
	8H	28.17	28.99	28.63	29.43	29.90	25.18	26.00	25.64	26.45	26.91
	12H	28.27	29.01	28.75	29.48	29.95	25.22	25.96	25.71	26.43	26.91
8H	4H	27.43	28.25	27.89	28.69	29.16	25.13	25.95	25.59	26.40	26.86
	6H	28.11	28.79	28.61	29.28	29.76	25.43	26.11	25.93	26.60	27.08
	8H	28.34	28.95	28.86	29.46	29.95	25.54	26.15	26.05	26.66	27.14
	12H	28.49	29.03	29.00	29.52	30.08	25.62	26.15	26.13	26.65	27.21
12H	4H	27.42	28.15	27.90	28.63	29.10	25.16	25.90	25.64	26.37	26.84
	6H	28.09	28.70	28.60	29.21	29.69	25.47	26.08	25.98	26.58	27.07
	8H	28.36	28.89	28.87	29.39	29.95	25.62	26.15	26.13	26.64	27.21