

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: P845605

Luminaire Tested: SQ2R-PP3-100D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PP3-100D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

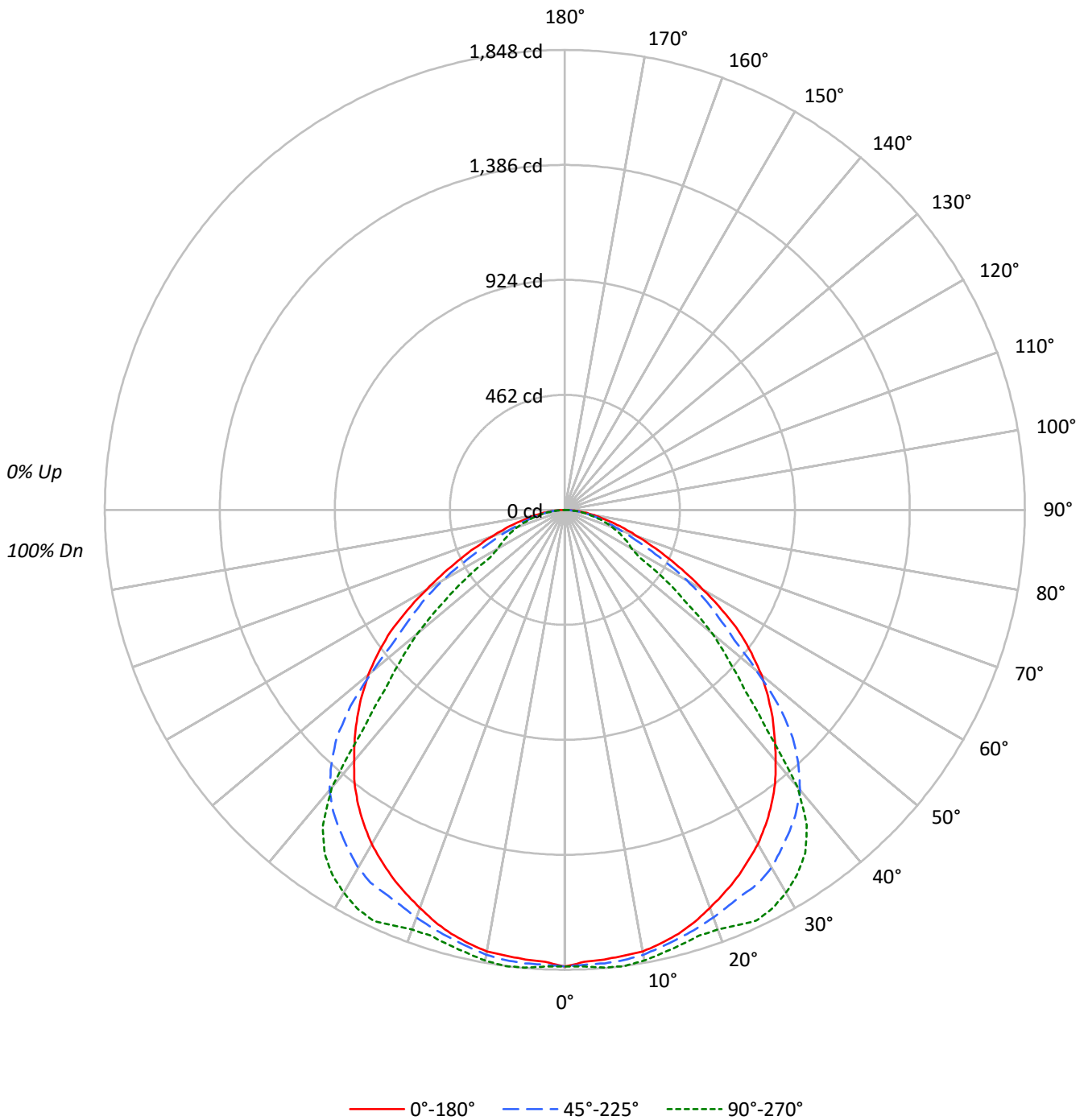
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4621.8 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9969
Total Harmonic Distortion (THDi): 0.066
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87				87
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74				74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55				55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34				34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31				31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29624	29624	29624
5°	29392	29644	29927
10°	29542	29763	30145
15°	29471	29762	30216
20°	29259	29960	30826
25°	29094	30337	32446
30°	28929	30954	33122
35°	28519	31042	33183
40°	27758	30987	30661
45°	26928	29583	23341
50°	25870	25237	19439
55°	24076	21239	13976
60°	20731	18225	10020
65°	17486	14078	9857
70°	14559	11080	9432
75°	12339	9557	8833
80°	10460	8294	7931
85°	8262	6836	4316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 29583 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.8	3.8
10°-20°	505.8	10.9
20°-30°	792.6	17.2
30°-40°	978.8	21.2
40°-50°	921.4	19.9
50°-60°	651.4	14.1
60°-70°	370.1	8.0
70°-80°	183.3	4.0
80°-90°	43.7	0.9
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°	1473.2	31.9
0°-40°	2451.9	53.1
0°-60°	4024.7	87.1
0°-90°	4621.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4621.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1835	1835	1835	1835	1835	
5°	1814	1846	1829	1833	1846	173
15°	1763	1788	1780	1798	1808	497
25°	1633	1676	1703	1771	1821	753
35°	1447	1488	1575	1664	1684	903
45°	1179	1270	1296	1100	1022	908
55°	855	908	754	570	496	756
65°	458	483	368	260	258	458
75°	198	219	153	144	142	213
85°	45	41	37	29	23	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1834.8	1834.8	1834.8	1834.8	1834.8
2.5°	1817.4	1850.3	1829.0	1832.9	1836.8
5°	1813.5	1846.5	1829.0	1832.9	1846.5
7.5°	1807.7	1842.6	1825.1	1830.9	1848.4
10°	1801.9	1830.9	1815.4	1825.1	1838.7
12.5°	1784.4	1811.6	1798.0	1811.6	1823.2
15°	1763.1	1788.3	1780.5	1798.0	1807.7
17.5°	1735.9	1765.0	1763.1	1786.3	1794.1
20°	1702.9	1739.8	1743.7	1774.7	1794.1
22.5°	1668.0	1712.6	1720.4	1770.8	1807.7
25°	1633.1	1675.8	1702.9	1770.8	1821.3
27.5°	1592.4	1635.1	1689.4	1765.0	1805.7
30°	1551.7	1592.4	1660.3	1739.8	1776.6
32.5°	1501.2	1543.9	1617.6	1704.9	1737.8
35°	1446.9	1487.6	1574.9	1664.1	1683.5
37.5°	1386.8	1429.5	1528.4	1588.5	1596.3
40°	1317.0	1377.1	1470.2	1479.9	1454.7
42.5°	1249.1	1330.5	1388.7	1338.3	1204.5
45°	1179.3	1270.4	1295.6	1099.7	1022.2
47.5°	1105.6	1196.7	1167.6	946.5	892.2
50°	1029.9	1115.2	1004.7	824.3	773.9
52.5°	944.6	1018.3	859.2	707.9	624.5
55°	855.3	907.7	754.5	570.2	496.5
57.5°	748.7	787.5	665.3	448.0	354.9
60°	642.0	671.1	564.4	351.1	310.3
62.5°	545.0	570.2	459.7	292.9	285.1
65°	457.7	483.0	368.5	259.9	258.0
67.5°	378.2	405.4	294.8	232.7	230.8
70°	308.4	337.5	234.7	203.7	199.8
72.5°	250.2	277.4	190.1	172.6	170.7
75°	197.8	219.2	153.2	143.5	141.6
77.5°	151.3	166.8	120.3	114.4	112.5
80°	112.5	118.3	89.2	87.3	85.3
82.5°	77.6	73.7	62.1	60.1	56.2
85°	44.6	40.7	36.9	29.1	23.3
87.5°	17.5	17.5	7.8	5.8	5.8
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	23.22	24.74	23.59	25.06	25.37	19.62	21.15	19.99	21.46	21.77
	3H	24.37	25.73	24.74	26.05	26.42	20.77	22.14	21.15	22.46	22.83
	4H	24.74	26.01	25.14	26.36	26.74	21.27	22.54	21.67	22.89	23.27
	6H	24.98	26.16	25.40	26.53	26.92	21.64	22.82	22.06	23.19	23.58
	8H	25.05	26.17	25.48	26.56	26.96	21.75	22.87	22.17	23.26	23.66
	12H	25.09	26.16	25.52	26.54	26.97	21.78	22.85	22.21	23.23	23.66
4H	2H	23.41	24.68	23.81	25.03	25.41	20.41	21.69	20.81	22.04	22.42
	3H	24.78	25.83	25.19	26.23	26.63	21.72	22.78	22.13	23.18	23.58
	4H	25.28	26.22	25.71	26.64	27.08	22.30	23.25	22.73	23.66	24.10
	6H	25.65	26.47	26.11	26.91	27.37	22.77	23.60	23.23	24.04	24.50
	8H	25.75	26.52	26.22	26.96	27.43	22.91	23.67	23.37	24.12	24.59
	12H	25.82	26.50	26.30	26.98	27.45	22.96	23.65	23.45	24.13	24.60
8H	4H	25.34	26.11	25.80	26.55	27.02	22.62	23.39	23.08	23.83	24.30
	6H	25.79	26.43	26.29	26.92	27.40	23.19	23.82	23.68	24.31	24.79
	8H	25.95	26.52	26.46	27.03	27.52	23.37	23.94	23.89	24.45	24.94
	12H	26.06	26.57	26.57	27.06	27.63	23.47	23.98	23.98	24.47	25.04
12H	4H	25.33	26.01	25.81	26.49	26.96	22.66	23.34	23.14	23.82	24.29
	6H	25.78	26.35	26.30	26.86	27.35	23.24	23.81	23.75	24.32	24.81
	8H	25.98	26.49	26.49	26.98	27.54	23.47	23.98	23.98	24.47	25.04