

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1036319

Luminaire Tested: SQ4R-PR1-125D-B2750-1D-UNV-W2A_4000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-125D-B2750-1D-UNV-W2A_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

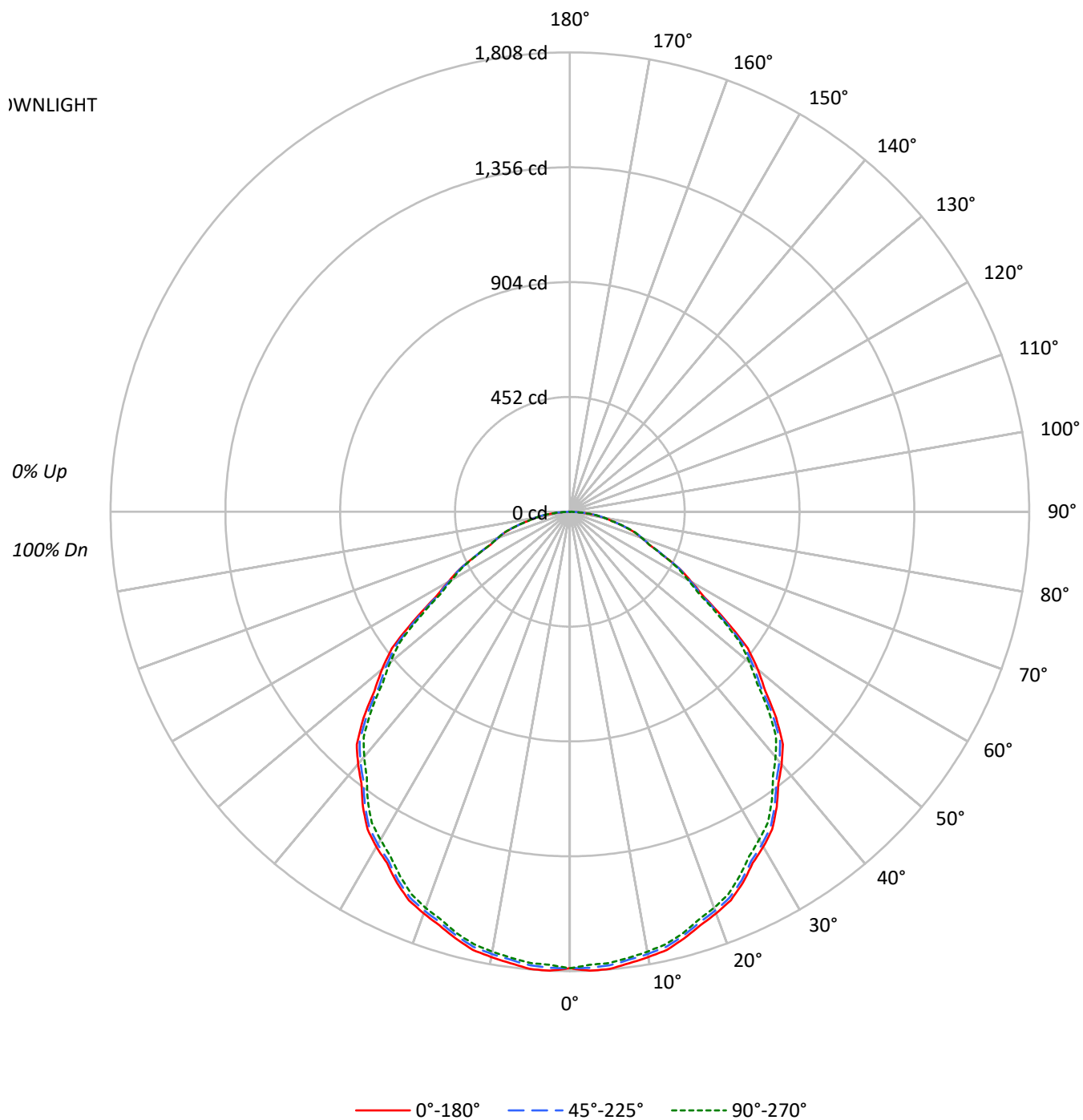
Lumens per Lamp: N/A
Luminaire Lumens: 4491.5 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 45.8
Input Voltage (V): NR
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	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16576	16576	16576
5°	16726	16597	16511
10°	16672	16557	16470
15°	16601	16497	16407
20°	16516	16408	16289
25°	16400	16291	16101
30°	16222	16108	15878
35°	15985	15844	15617
40°	15617	15450	15172
45°	14984	14721	14417
50°	13861	13528	13260
55°	12096	11826	11577
60°	10195	10110	9909
65°	8818	8852	8783
70°	8095	8139	8139
75°	7778	7778	7835
80°	7311	7401	7311
85°	5896	6553	6553

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14984 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	3.8
10°-20°	486.1	10.8
20°-30°	733.2	16.3
30°-40°	873.6	19.5
40°-50°	861.3	19.2
50°-60°	658.3	14.7
60°-70°	407.3	9.1
70°-80°	231.4	5.2
80°-90°	70.4	1.6
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°	1389.3	30.9
0°-40°	2262.9	50.4
0°-60°	3782.5	84.2
0°-90°	4491.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4491.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1806	1786	1792	1786	1783	171
15°	1738	1720	1727	1721	1718	490
25°	1611	1591	1600	1583	1582	741
35°	1419	1402	1407	1388	1387	886
45°	1148	1133	1128	1108	1105	880
55°	752	740	735	723	720	674
65°	404	401	406	402	402	409
75°	218	218	218	220	220	230
85°	56	59	62	62	62	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1796.6	1796.6	1796.6	1796.6	1796.6
2.5°	1807.9	1792.1	1796.6	1793.0	1784.4
5°	1806.0	1786.3	1792.1	1785.7	1782.8
7.5°	1792.1	1772.7	1778.5	1772.1	1770.5
10°	1779.6	1761.5	1767.3	1761.2	1758.0
12.5°	1766.0	1746.7	1753.7	1746.3	1743.3
15°	1738.0	1719.8	1727.1	1720.9	1717.7
17.5°	1707.0	1687.5	1695.0	1687.8	1683.8
20°	1682.2	1664.1	1671.2	1660.6	1659.0
22.5°	1655.1	1636.8	1644.1	1629.7	1629.4
25°	1611.0	1591.3	1600.3	1583.3	1581.6
27.5°	1558.7	1540.6	1547.8	1530.4	1528.8
30°	1522.7	1504.6	1512.0	1493.3	1490.4
32.5°	1481.9	1465.1	1471.2	1452.5	1450.7
35°	1419.2	1402.4	1406.7	1388.3	1386.6
37.5°	1347.7	1332.5	1334.9	1314.3	1313.0
40°	1296.7	1281.8	1282.8	1261.2	1259.7
42.5°	1241.3	1226.1	1224.7	1203.1	1201.5
45°	1148.4	1133.2	1128.2	1107.8	1104.9
47.5°	1042.5	1027.3	1018.0	1001.4	999.3
50°	965.7	950.5	942.5	928.4	923.8
52.5°	882.7	867.5	860.8	848.0	843.5
55°	752.0	740.0	735.2	722.6	719.7
57.5°	628.0	620.0	618.4	606.3	605.0
60°	552.5	547.9	547.9	537.0	537.0
62.5°	488.2	484.7	487.1	479.9	478.8
65°	403.9	400.9	405.5	402.3	402.3
67.5°	337.4	337.4	340.1	338.8	338.8
70°	300.1	300.1	301.7	301.7	301.7
72.5°	266.8	265.7	269.7	269.4	268.3
75°	218.2	218.2	218.2	219.8	219.8
77.5°	170.0	170.2	171.5	171.2	170.0
80°	137.6	139.3	139.3	137.6	137.6
82.5°	105.6	107.0	107.0	106.7	105.6
85°	55.7	58.7	61.9	61.9	61.9
87.5°	16.0	20.8	24.8	24.8	23.5
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	19.86	21.42	20.22	21.74	22.05	19.69	21.25	20.05	21.56	21.88
	3H	21.19	22.60	21.57	22.92	23.28	21.09	22.50	21.47	22.82	23.18
	4H	21.80	23.11	22.19	23.46	23.84	21.72	23.04	22.12	23.39	23.77
	6H	22.24	23.46	22.65	23.83	24.22	22.18	23.40	22.59	23.76	24.16
	8H	22.43	23.59	22.85	23.98	24.38	22.37	23.53	22.79	23.92	24.32
	12H	22.53	23.65	22.96	24.03	24.46	22.49	23.60	22.92	23.99	24.42
4H	2H	20.33	21.65	20.73	22.00	22.38	20.19	21.51	20.59	21.86	22.24
	3H	21.93	23.03	22.34	23.43	23.83	21.86	22.96	22.27	23.36	23.76
	4H	22.67	23.66	23.10	24.07	24.51	22.62	23.61	23.06	24.03	24.46
	6H	23.26	24.12	23.71	24.56	25.02	23.22	24.08	23.67	24.52	24.98
	8H	23.50	24.31	23.96	24.75	25.22	23.46	24.27	23.93	24.71	25.18
	12H	23.66	24.38	24.14	24.86	25.33	23.64	24.36	24.12	24.84	25.31
8H	4H	22.94	23.75	23.41	24.19	24.66	22.90	23.71	23.37	24.15	24.62
	6H	23.67	24.34	24.17	24.83	25.31	23.64	24.31	24.13	24.80	25.27
	8H	24.01	24.61	24.52	25.12	25.60	23.97	24.58	24.48	25.08	25.57
	12H	24.24	24.78	24.75	25.27	25.83	24.23	24.77	24.74	25.26	25.82
12H	4H	22.98	23.70	23.46	24.17	24.65	22.93	23.66	23.42	24.13	24.60
	6H	23.73	24.34	24.25	24.85	25.33	23.70	24.30	24.21	24.81	25.30
	8H	24.13	24.67	24.64	25.16	25.72	24.10	24.64	24.61	25.13	25.69