

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: P845540

Luminaire Tested: SQ2R-FB-125D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-FB-125D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

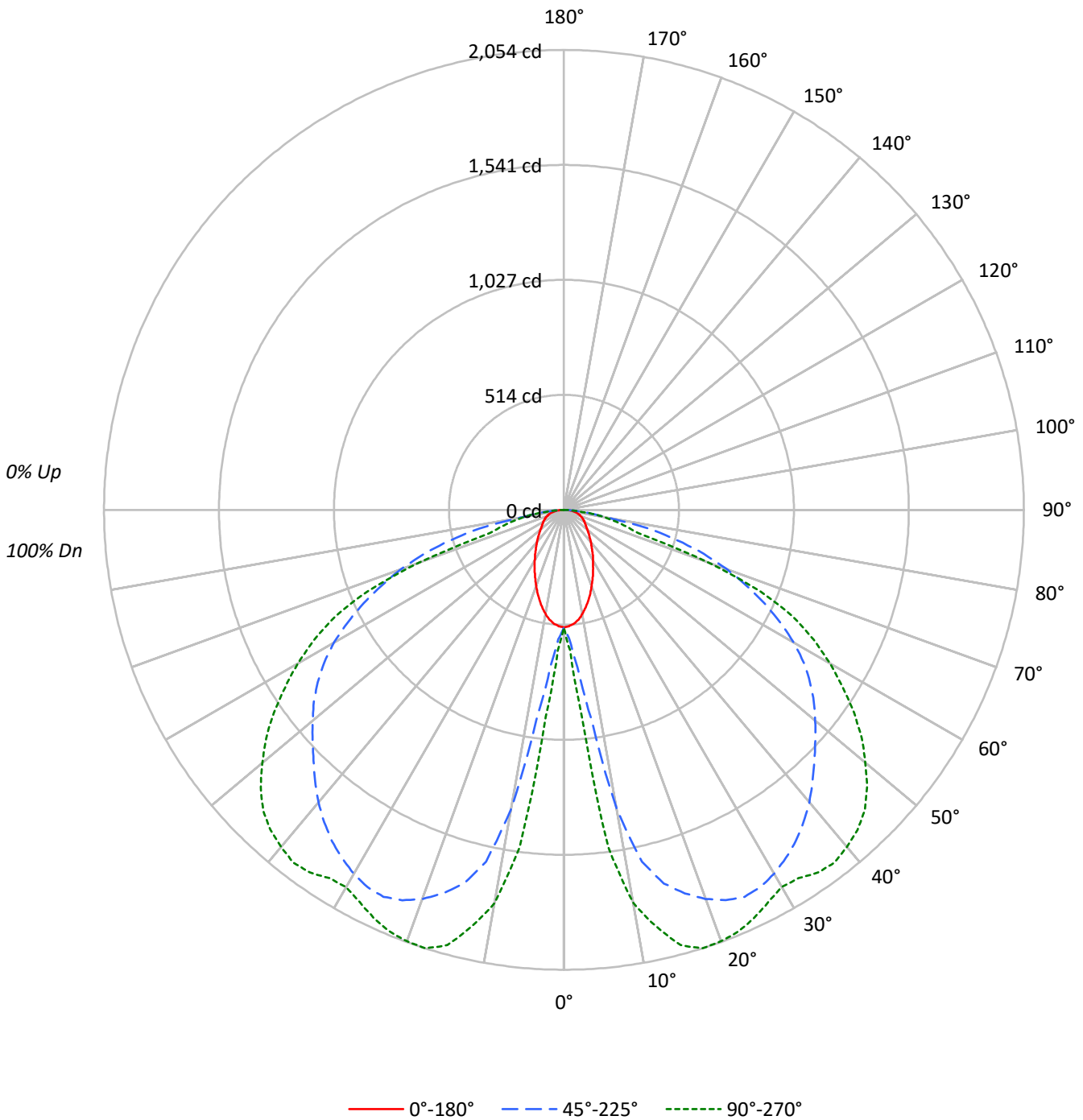
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5202.5 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 2.99 / 2.56
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8483	8483	8483
5°	8269	11462	15024
10°	7743	22195	29235
15°	7009	28878	33648
20°	6206	31768	35239
25°	5489	33973	35817
30°	4851	34988	36260
35°	4330	35595	38981
40°	3939	35934	41418
45°	3633	36102	43370
50°	3426	36799	44156
55°	3341	37754	44507
60°	3426	38253	44288
65°	3572	37731	43037
70°	3696	36487	32549
75°	4099	32776	17960
80°	4231	16913	16671
85°	4205	11689	7021

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 44507 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.5	1.7
10°-20°	403.3	7.8
20°-30°	709.9	13.6
30°-40°	918.1	17.6
40°-50°	1012.6	19.5
50°-60°	944.6	18.2
60°-70°	731.0	14.1
70°-80°	334.1	6.4
80°-90°	62.4	1.2
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°	1199.7	23.1
0°-40°	2117.7	40.7
0°-60°	4074.9	78.3
0°-90°	5202.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5202.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	510	586	707	861	927	48
15°	419	836	1728	1932	2013	117
25°	308	1129	1907	1990	2010	142
35°	220	1091	1806	1867	1978	138
45°	159	836	1581	1814	1899	123
55°	119	498	1341	1541	1581	107
65°	94	280	988	1106	1126	92
75°	66	172	525	283	288	68
85°	23	50	63	43	38	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	525.4	525.4	525.4	525.4	525.4
2.5°	520.3	548.1	578.4	613.8	628.9
5°	510.2	586.0	707.2	861.3	927.0
7.5°	495.1	634.0	947.2	1374.0	1520.5
10°	472.3	687.0	1353.8	1712.5	1783.2
12.5°	447.1	757.7	1608.9	1833.7	1907.0
15°	419.3	836.0	1727.6	1932.2	2013.0
17.5°	391.5	921.9	1795.8	2005.5	2053.5
20°	361.2	1012.8	1848.9	2023.2	2050.9
22.5°	333.4	1081.0	1886.8	2008.0	2038.3
25°	308.1	1129.0	1907.0	1990.3	2010.5
27.5°	282.9	1146.7	1899.4	1957.5	1975.2
30°	260.2	1141.7	1876.7	1917.1	1944.9
32.5°	239.9	1126.5	1843.8	1881.7	1949.9
35°	219.7	1091.1	1805.9	1866.6	1977.7
37.5°	202.1	1040.6	1757.9	1874.1	1985.3
40°	186.9	982.5	1704.9	1874.1	1965.1
42.5°	171.8	914.3	1644.3	1848.9	1939.8
45°	159.1	836.0	1581.1	1813.5	1899.4
47.5°	146.5	750.2	1523.0	1770.6	1836.2
50°	136.4	661.8	1465.0	1707.4	1757.9
52.5°	126.3	575.9	1406.9	1631.7	1677.1
55°	118.7	497.6	1341.2	1540.7	1581.1
57.5°	111.1	426.9	1270.5	1444.7	1477.6
60°	106.1	371.3	1184.6	1338.7	1371.5
62.5°	98.5	320.8	1088.6	1227.5	1257.8
65°	93.5	280.4	987.6	1106.3	1126.5
67.5°	85.9	247.5	881.5	967.4	947.2
70°	78.3	224.8	772.9	798.1	689.5
72.5°	73.2	199.5	654.2	578.4	348.6
75°	65.7	171.8	525.4	282.9	287.9
77.5°	55.6	138.9	386.4	227.3	232.4
80°	45.5	108.6	181.9	176.8	179.3
82.5°	35.4	78.3	111.1	118.7	113.7
85°	22.7	50.5	63.1	42.9	37.9
87.5°	10.1	22.7	12.6	12.6	12.6
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	18.32	20.01	18.69	20.32	20.64	26.98	28.66	27.34	28.98	29.29
	3H	19.11	20.64	19.49	20.96	21.32	28.66	30.19	29.04	30.51	30.87
	4H	19.45	20.88	19.85	21.23	21.60	28.88	30.32	29.28	30.66	31.04
	6H	19.70	21.03	20.11	21.40	21.79	29.01	30.34	29.42	30.70	31.09
	8H	19.78	21.05	20.21	21.44	21.84	29.04	30.31	29.46	30.69	31.09
	12H	19.84	21.06	20.27	21.44	21.86	29.03	30.25	29.46	30.63	31.06
4H	2H	22.76	24.19	23.16	24.54	24.92	27.52	28.95	27.91	29.30	29.67
	3H	23.77	24.97	24.18	25.37	25.77	29.42	30.62	29.83	31.02	31.42
	4H	24.10	25.18	24.53	25.59	26.03	29.70	30.78	30.13	31.19	31.63
	6H	24.28	25.22	24.73	25.66	26.12	29.89	30.84	30.34	31.28	31.73
	8H	24.32	25.20	24.78	25.65	26.11	29.94	30.82	30.40	31.26	31.73
	12H	24.35	25.15	24.83	25.62	26.09	29.95	30.74	30.43	31.22	31.69
8H	4H	25.33	26.22	25.79	26.66	27.12	29.88	30.77	30.34	31.21	31.67
	6H	25.61	26.34	26.10	26.83	27.30	30.13	30.86	30.62	31.35	31.82
	8H	25.69	26.35	26.20	26.85	27.34	30.20	30.85	30.71	31.36	31.84
	12H	25.76	26.34	26.27	26.83	27.39	30.23	30.81	30.74	31.30	31.86
12H	4H	25.39	26.18	25.87	26.66	27.13	29.88	30.67	30.36	31.14	31.61
	6H	25.71	26.37	26.22	26.88	27.36	30.12	30.78	30.63	31.28	31.77
	8H	25.86	26.44	26.37	26.93	27.49	30.23	30.81	30.73	31.30	31.85