

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: P1055093

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

Issue Date: 7/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055093
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-FB-125D-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH BATWING FROSTED CONTINUOUS ROLL LEN
1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

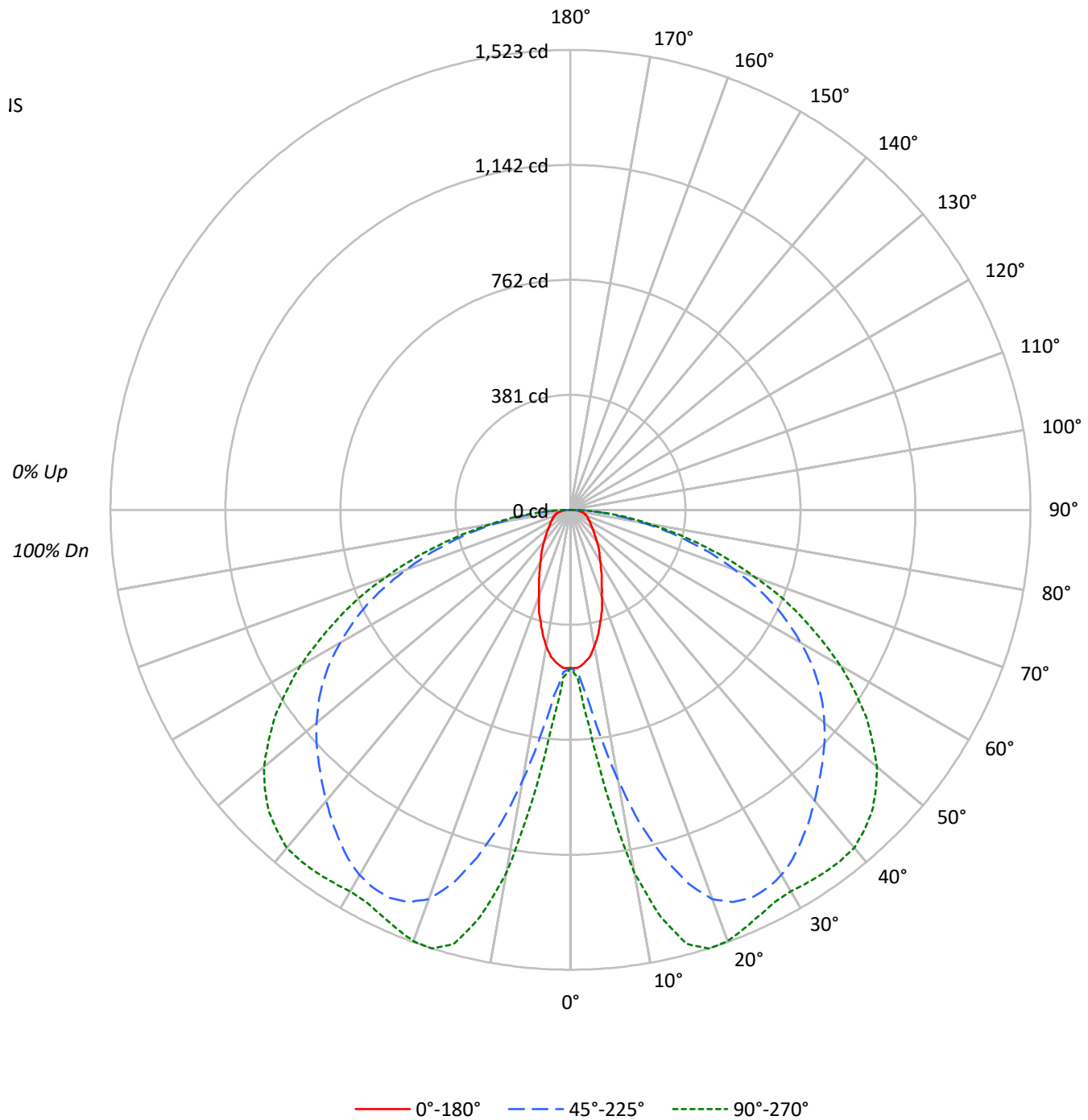
Lumens per Lamp: N/A
Luminaire Lumens: 4054.4 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

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: P1055093

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

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
RW	70	50	30	10	70	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
1	108	103	98	94	105	100	96	92	96	93	90			92	89	87		89
2	97	89	81	75	95	87	80	74	83	77	72			80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	60			69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50			61	54	49		59
5	73	60	50	43	71	59	50	43	56	48	42			54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	37			49	42	36		47
7	62	48	39	32	60	47	38	32	46	38	32			44	37	32		43
8	58	43	35	28	56	43	34	28	41	34	28			40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25			37	30	25		36
10	50	36	28	23	49	36	28	23	35	27	22			34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5046	5046	5046
5°	4934	5961	6987
10°	4481	8879	11928
15°	3812	11859	14831
20°	3107	14054	15574
25°	2596	15055	15735
30°	2192	15530	16224
35°	1942	15686	17231
40°	1694	15800	18363
45°	1537	16060	19227
50°	1414	16432	19839
55°	1358	16802	20054
60°	1396	16971	19890
65°	1458	16930	19311
70°	1565	16222	18263
75°	1756	15169	16735
80°	1963	13173	14576
85°	1867	11168	12471

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 55°

Luminance: 20054 cd/sqm

TEST NUMBER: P1055093

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	1.7
10°-20°	300.5	7.4
20°-30°	525.6	13.0
30°-40°	676.6	16.7
40°-50°	755.7	18.6
50°-60°	723.8	17.9
60°-70°	573.6	14.1
70°-80°	337.3	8.3
80°-90°	93.7	2.3
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°	893.8	22.0
0°-40°	1570.4	38.7
0°-60°	3049.8	75.2
0°-90°	4054.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4054.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	524	524	524	524	524	
5°	511	548	617	698	723	47
15°	382	706	1190	1442	1488	106
25°	244	800	1417	1480	1481	113
35°	165	765	1335	1410	1466	103
45°	113	610	1180	1352	1412	87
55°	81	388	1001	1163	1195	74
65°	64	206	743	836	848	63
75°	47	126	408	448	450	49
85°	17	39	101	111	113	19
90°	0	0	0	0	0	

TEST NUMBER: P1055093

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

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1	524.1
2.5°	524.1	524.1	527.5	529.2	532.5	534.2	537.6	541.0	551.1	552.7	556.1
5°	510.6	517.4	539.3	547.7	571.3	603.3	616.8	638.7	684.2	697.7	706.1
7.5°	490.4	505.6	559.5	573.0	632.0	716.2	751.6	798.8	871.3	906.6	935.3
10°	458.4	490.4	586.5	618.5	714.5	842.6	908.3	974.0	1083.6	1132.5	1151.0
12.5°	423.0	475.2	615.1	658.9	797.1	984.2	1063.4	1135.8	1260.5	1326.3	1336.4
15°	382.5	453.3	642.1	706.1	884.7	1102.1	1189.8	1279.1	1395.3	1442.5	1454.3
17.5°	347.2	436.5	667.3	734.7	952.1	1208.3	1297.6	1371.8	1466.1	1498.1	1506.6
20°	303.3	409.5	684.2	771.8	1022.9	1285.8	1371.8	1429.1	1493.1	1513.3	1516.7
22.5°	271.3	380.9	694.3	785.3	1070.1	1333.0	1405.5	1451.0	1494.8	1501.5	1503.2
25°	244.4	348.8	692.6	800.5	1110.5	1361.6	1417.3	1451.0	1476.2	1479.6	1479.6
27.5°	219.1	313.4	685.9	803.8	1140.9	1368.4	1412.2	1435.8	1447.6	1454.3	1454.3
30°	197.2	279.7	669.0	797.1	1154.4	1361.6	1397.0	1408.8	1420.6	1430.7	1435.8
32.5°	180.3	247.7	643.7	783.6	1156.1	1344.8	1370.1	1376.8	1393.7	1417.3	1425.7
35°	165.2	215.7	615.1	765.1	1145.9	1317.8	1334.7	1341.4	1375.1	1410.5	1422.3
37.5°	150.0	192.1	578.0	733.1	1130.8	1285.8	1297.6	1309.4	1361.6	1403.8	1417.3
40°	134.8	171.9	534.2	697.7	1107.2	1247.1	1257.2	1275.7	1344.8	1393.7	1407.1
42.5°	123.0	155.0	487.0	660.6	1076.8	1203.2	1218.4	1245.4	1324.6	1376.8	1392.0
45°	112.9	138.2	436.5	610.0	1038.1	1157.7	1179.6	1216.7	1301.0	1351.5	1365.0
47.5°	102.8	126.4	384.2	557.8	996.0	1112.2	1140.9	1183.0	1269.0	1317.8	1329.6
50°	94.4	114.6	332.0	502.2	950.5	1063.4	1097.1	1140.9	1228.5	1274.0	1289.2
52.5°	87.6	104.5	283.1	446.6	898.2	1012.8	1051.6	1097.1	1179.6	1223.5	1233.6
55°	80.9	96.1	241.0	387.6	844.3	958.9	1001.0	1044.8	1125.7	1162.8	1169.5
57.5°	77.5	89.3	205.6	332.0	787.0	898.2	945.4	985.8	1061.7	1090.3	1097.1
60°	72.5	84.3	178.6	284.8	724.6	840.9	881.4	921.8	985.8	1009.4	1014.5
62.5°	67.4	80.9	158.4	239.3	660.6	773.5	814.0	851.0	905.0	921.8	928.5
65°	64.0	77.5	143.2	205.6	594.9	702.7	743.2	775.2	819.0	835.9	839.2
67.5°	60.7	74.1	131.4	176.9	529.2	632.0	662.3	692.6	726.3	743.2	744.9
70°	55.6	70.8	121.3	156.7	461.7	551.1	576.3	608.4	635.3	643.7	648.8
72.5°	52.2	65.7	114.6	141.6	392.7	473.5	497.1	515.7	539.3	547.7	547.7
75°	47.2	59.0	107.9	126.4	321.9	387.6	407.8	426.4	444.9	448.3	443.2
77.5°	42.1	52.2	92.7	106.2	251.1	306.7	323.6	333.7	348.8	352.2	353.9
80°	35.4	45.5	72.5	82.6	182.0	225.8	237.6	246.0	259.5	259.5	262.9
82.5°	27.0	35.4	52.2	59.0	123.0	155.0	165.2	170.2	178.6	178.6	178.6
85°	16.9	21.9	33.7	38.8	74.1	94.4	101.1	102.8	109.5	111.2	111.2
87.5°	8.4	11.8	21.9	23.6	38.8	48.9	48.9	52.2	52.2	50.6	48.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1055093

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

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	524.1	524.1
2.5°	559.5	556.1
5°	719.6	723.0
7.5°	969.0	967.3
10°	1204.9	1220.1
12.5°	1376.8	1380.2
15°	1481.3	1488.0
17.5°	1521.7	1523.4
20°	1523.4	1520.1
22.5°	1504.9	1501.5
25°	1483.0	1481.3
27.5°	1462.8	1464.4
30°	1454.3	1459.4
32.5°	1454.3	1462.8
35°	1457.7	1466.1
37.5°	1456.0	1466.1
40°	1449.3	1461.1
42.5°	1430.7	1439.2
45°	1402.1	1412.2
47.5°	1365.0	1371.8
50°	1317.8	1324.6
52.5°	1258.8	1260.5
55°	1188.1	1194.8
57.5°	1112.2	1113.9
60°	1028.0	1033.0
62.5°	938.7	938.7
65°	844.3	847.7
67.5°	746.5	755.0
70°	647.1	648.8
72.5°	549.4	549.4
75°	448.3	449.9
77.5°	352.2	352.2
80°	261.2	262.9
82.5°	180.3	183.7
85°	112.9	112.9
87.5°	52.2	47.2
90°	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	11.83	13.54	12.19	13.86	14.17	24.15	25.87	24.51	26.18	26.49
	3H	12.76	14.32	13.14	14.64	15.00	26.06	27.62	26.44	27.95	28.31
	4H	13.24	14.71	13.63	15.05	15.43	26.75	28.23	27.15	28.57	28.95
	6H	13.73	15.09	14.14	15.46	15.85	27.24	28.61	27.65	28.97	29.36
	8H	13.93	15.23	14.35	15.62	16.02	27.39	28.70	27.82	29.09	29.49
	12H	14.06	15.32	14.49	15.70	16.13	27.50	28.75	27.93	29.13	29.56
4H	2H	19.16	20.63	19.56	20.98	21.35	24.66	26.13	25.06	26.48	26.85
	3H	21.10	22.34	21.51	22.73	23.13	26.84	28.09	27.25	28.48	28.88
	4H	21.29	22.42	21.72	22.83	23.26	27.69	28.81	28.12	29.22	29.66
	6H	21.41	22.40	21.86	22.84	23.29	28.31	29.30	28.76	29.74	30.19
	8H	21.44	22.36	21.90	22.80	23.27	28.51	29.44	28.97	29.88	30.34
	12H	21.46	22.30	21.94	22.77	23.24	28.66	29.50	29.14	29.97	30.44
8H	4H	22.94	23.87	23.40	24.31	24.77	27.92	28.85	28.38	29.29	29.75
	6H	23.39	24.16	23.88	24.65	25.12	28.68	29.45	29.17	29.93	30.41
	8H	23.48	24.17	23.98	24.67	25.16	28.95	29.65	29.46	30.15	30.63
	12H	23.52	24.13	24.02	24.62	25.18	29.18	29.79	29.68	30.28	30.84
12H	4H	23.15	23.99	23.63	24.46	24.93	27.93	28.77	28.41	29.24	29.71
	6H	23.73	24.43	24.24	24.93	25.41	28.70	29.40	29.21	29.90	30.38
	8H	23.94	24.56	24.45	25.05	25.60	29.04	29.65	29.54	30.14	30.70