

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: P845624

Luminaire Tested: SQ2R-PR1-075D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845624
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PR1-075D-940-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

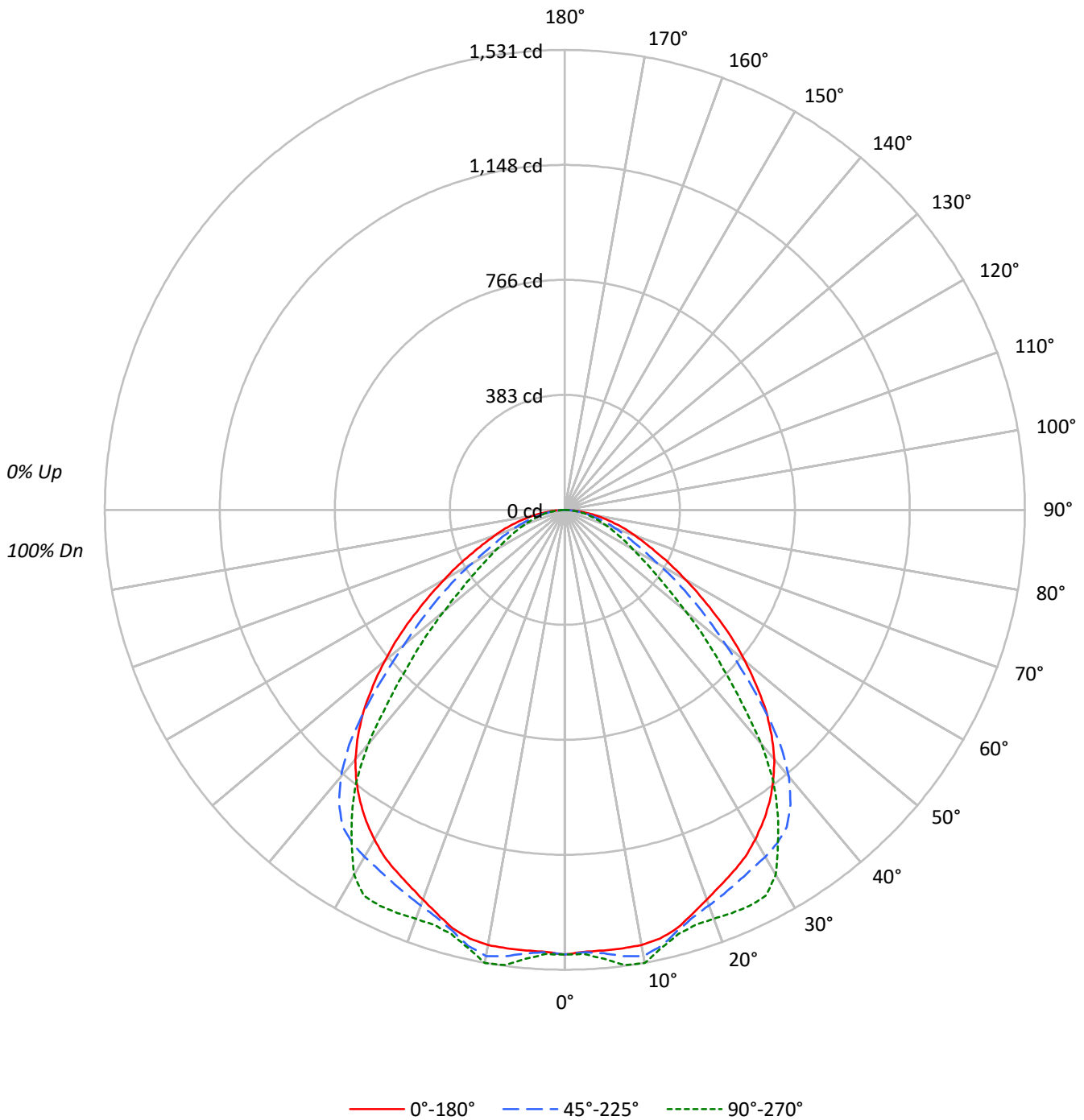
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3560.9 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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: P845624
CATALOG NUMBER: SQ2R-PR1-075D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845624

CATALOG NUMBER: SQ2R-PR1-075D-940-UNV-STD-W-4

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	108	104	101	97	100	97	94	96	94	92	92	91	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39				39
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35				35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23897	23897	23897
5°	23866	24013	24306
10°	24117	24735	25107
15°	24109	24236	24438
20°	23720	24082	24886
25°	23653	24325	25910
30°	23627	24865	26159
35°	23404	25395	24354
40°	22864	24453	21433
45°	21635	21461	16949
50°	19668	17545	13150
55°	17284	14441	10235
60°	14958	11548	8428
65°	12913	9566	7377
70°	11608	8474	6552
75°	10636	7342	6026
80°	9261	5895	5895
85°	6706	5317	2797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 23425 cd/sqm

TEST NUMBER: P845624

CATALOG NUMBER: SQ2R-PR1-075D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.9	4.0
10°-20°	413.9	11.6
20°-30°	640.1	18.0
30°-40°	770.7	21.6
40°-50°	691.9	19.4
50°-60°	461.9	13.0
60°-70°	268.3	7.5
70°-80°	138.0	3.9
80°-90°	33.2	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°	1196.9	33.6
0°-40°	1967.6	55.3
0°-60°	3121.4	87.7
0°-90°	3560.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3560.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1480	1480	1480	1480	1480	
5°	1472	1498	1482	1485	1500	141
15°	1442	1503	1450	1454	1462	405
25°	1328	1382	1365	1415	1454	613
35°	1187	1198	1288	1264	1236	741
45°	948	1026	940	794	742	726
55°	614	638	513	397	364	551
65°	338	346	250	204	193	341
75°	170	166	118	100	97	181
85°	36	29	29	20	15	45
90°	0	0	0	0	0	



TEST NUMBER: P845624

CATALOG NUMBER: SQ2R-PR1-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1480.1	1480.1	1480.1	1480.1	1480.1
2.5°	1472.5	1495.1	1474.0	1475.5	1480.1
5°	1472.5	1498.2	1481.6	1484.6	1499.7
7.5°	1472.5	1507.2	1498.2	1508.7	1528.3
10°	1471.0	1514.8	1508.7	1510.2	1531.4
12.5°	1462.0	1514.8	1486.1	1483.1	1492.1
15°	1442.3	1502.7	1449.9	1454.4	1462.0
17.5°	1410.7	1474.0	1421.2	1436.3	1448.4
20°	1380.5	1442.3	1401.6	1422.7	1448.4
22.5°	1353.3	1415.2	1383.5	1415.2	1452.9
25°	1327.7	1382.0	1365.4	1415.2	1454.4
27.5°	1302.0	1336.7	1347.3	1416.7	1448.4
30°	1267.3	1288.4	1333.7	1392.5	1403.1
32.5°	1229.6	1240.2	1315.6	1339.7	1320.1
35°	1187.4	1197.9	1288.4	1264.3	1235.6
37.5°	1139.1	1157.2	1234.1	1172.3	1140.6
40°	1084.8	1121.0	1160.2	1054.6	1016.9
42.5°	1018.4	1081.8	1062.1	920.3	872.0
45°	947.5	1025.9	939.9	793.6	742.3
47.5°	864.5	949.0	811.7	678.9	632.2
50°	783.0	847.9	698.5	576.3	523.5
52.5°	700.0	742.3	602.0	479.8	433.0
55°	614.0	638.2	513.0	396.8	363.6
57.5°	534.1	550.7	434.5	330.4	304.8
60°	463.2	473.7	357.6	280.6	261.0
62.5°	398.3	405.8	295.7	238.4	224.8
65°	338.0	345.5	250.4	203.7	193.1
67.5°	288.2	292.7	212.7	175.0	164.5
70°	245.9	247.4	179.5	146.3	138.8
72.5°	208.2	205.2	147.9	122.2	117.7
75°	170.5	166.0	117.7	99.6	96.6
77.5°	134.3	129.8	87.5	80.0	80.0
80°	99.6	93.5	63.4	63.4	63.4
82.5°	67.9	58.8	45.3	45.3	43.8
85°	36.2	28.7	28.7	19.6	15.1
87.5°	12.1	12.1	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P845624

CATALOG NUMBER: SQ2R-PR1-075D-940-UNV-STD-W-4

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	21.73	23.23	22.10	23.54	23.86	18.46	19.96	18.83	20.27	20.59
	3H	23.01	24.35	23.39	24.68	25.04	19.57	20.91	19.95	21.24	21.60
	4H	23.49	24.74	23.89	25.09	25.47	20.00	21.25	20.40	21.60	21.98
	6H	23.84	24.99	24.25	25.36	25.75	20.36	21.52	20.78	21.88	22.28
	8H	23.94	25.04	24.37	25.43	25.83	20.47	21.56	20.89	21.95	22.36
	12H	23.99	25.04	24.42	25.42	25.85	20.49	21.54	20.92	21.93	22.36
4H	2H	21.89	23.14	22.29	23.49	23.87	19.10	20.36	19.51	20.71	21.08
	3H	23.41	24.45	23.82	24.85	25.25	20.43	21.46	20.84	21.86	22.26
	4H	24.03	24.96	24.46	25.37	25.81	20.96	21.88	21.39	22.30	22.74
	6H	24.51	25.32	24.97	25.76	26.22	21.42	22.23	21.88	22.67	23.13
	8H	24.66	25.41	25.12	25.85	26.32	21.56	22.31	22.02	22.75	23.22
	12H	24.74	25.41	25.22	25.89	26.36	21.60	22.28	22.09	22.76	23.23
8H	4H	24.10	24.85	24.56	25.30	25.76	21.30	22.06	21.77	22.50	22.97
	6H	24.67	25.29	25.16	25.78	26.26	21.86	22.48	22.36	22.97	23.45
	8H	24.86	25.42	25.38	25.93	26.42	22.04	22.60	22.56	23.11	23.60
	12H	24.99	25.49	25.50	25.98	26.55	22.13	22.63	22.64	23.12	23.69
12H	4H	24.08	24.76	24.57	25.23	25.71	21.35	22.02	21.83	22.50	22.97
	6H	24.65	25.21	25.17	25.72	26.21	21.92	22.48	22.43	22.99	23.48
	8H	24.89	25.39	25.40	25.88	26.44	22.15	22.65	22.66	23.14	23.70