

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: P845648

Luminaire Tested: SQ2R-PW1-075D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PW1-075D-940-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

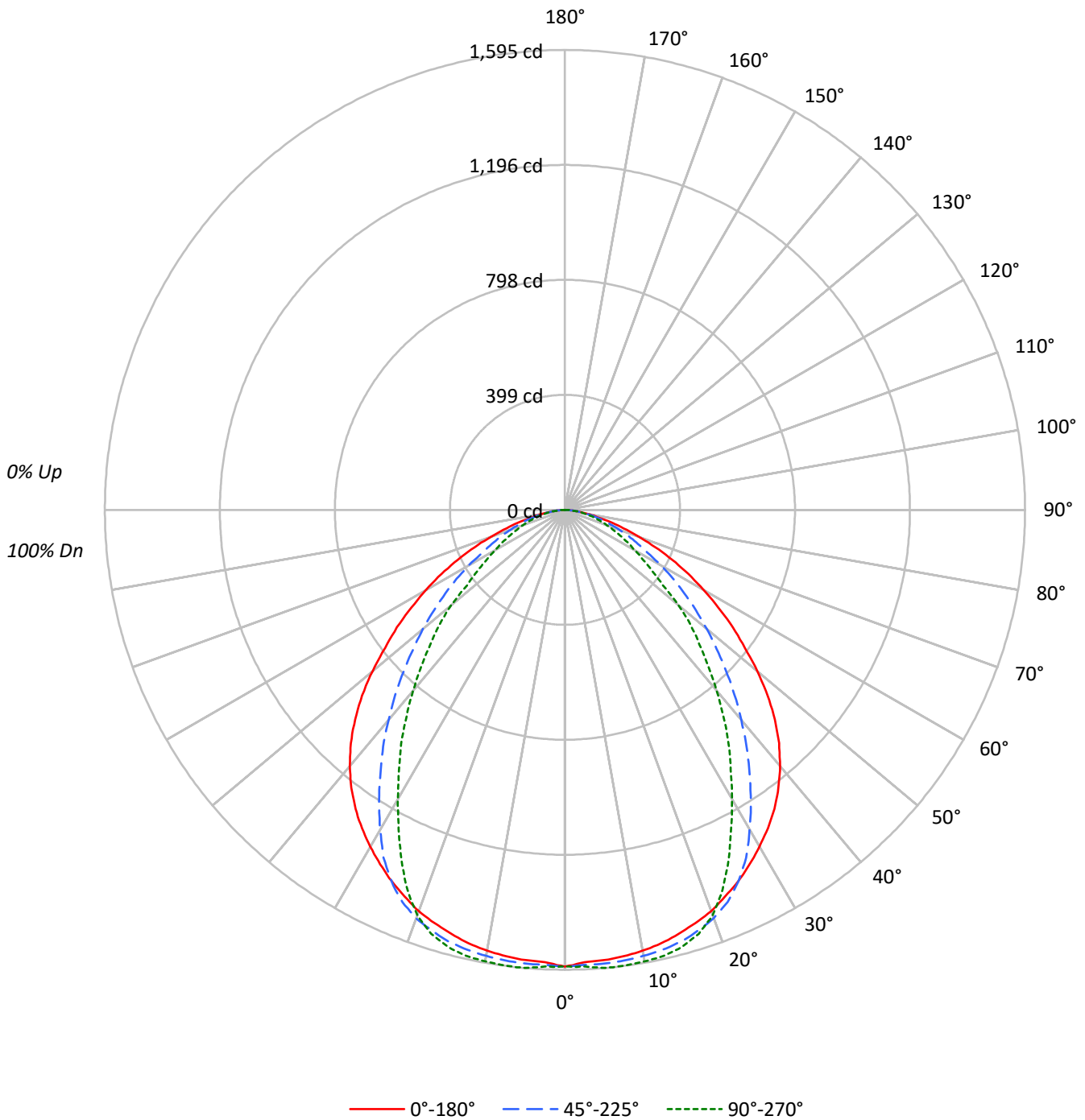
Lumens per Lamp: N/A
Luminaire Lumens: 3514.2 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.12 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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: P845648

CATALOG NUMBER: SQ2R-PW1-075D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845648

CATALOG NUMBER: SQ2R-PW1-075D-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	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74				74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56				56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49				49
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	53	46	42	51	46	41	39				39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35				35
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32				32
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25578	25578	25578
5°	25407	25601	25846
10°	25453	25750	26071
15°	25446	25926	26228
20°	25457	25897	25716
25°	25319	25345	23895
30°	25147	23881	21602
35°	24949	21975	19507
40°	24453	20034	17235
45°	23496	18018	15054
50°	21866	16106	12886
55°	20003	14227	10446
60°	17928	12374	9013
65°	15679	10663	8011
70°	12821	9475	7265
75°	9975	8191	6681
80°	7438	7011	5895
85°	5039	5317	3353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23496 cd/sqm

TEST NUMBER: P845648

CATALOG NUMBER: SQ2R-PW1-075D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.9	4.3
10°-20°	437.5	12.4
20°-30°	644.2	18.3
30°-40°	703.8	20.0
40°-50°	630.8	18.0
50°-60°	469.8	13.4
60°-70°	296.7	8.4
70°-80°	146.9	4.2
80°-90°	33.5	1.0
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°	1232.6	35.1
0°-40°	1936.4	55.1
0°-60°	3037.0	86.4
0°-90°	3514.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3514.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1584	1584	1584	1584	1584	
5°	1568	1593	1580	1581	1595	149
15°	1522	1552	1551	1562	1569	430
25°	1421	1453	1423	1364	1341	655
35°	1266	1252	1115	1018	990	790
45°	1029	944	789	691	659	790
55°	711	641	505	397	371	634
65°	410	376	279	225	210	407
75°	160	172	131	110	107	175
85°	27	35	29	20	18	34
90°	0	0	0	0	0	



TEST NUMBER: P845648

CATALOG NUMBER: SQ2R-PW1-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1584.2	1584.2	1584.2	1584.2	1584.2
2.5°	1570.6	1596.2	1579.6	1581.1	1585.7
5°	1567.6	1593.2	1579.6	1581.1	1594.7
7.5°	1561.5	1587.2	1576.6	1581.1	1594.7
10°	1552.5	1579.6	1570.6	1578.1	1590.2
12.5°	1540.4	1569.1	1563.0	1572.1	1584.2
15°	1522.3	1552.5	1551.0	1561.5	1569.1
17.5°	1502.7	1532.9	1531.4	1537.4	1541.9
20°	1481.6	1511.7	1507.2	1496.7	1496.7
22.5°	1451.4	1484.6	1472.5	1439.3	1427.3
25°	1421.2	1452.9	1422.7	1363.9	1341.3
27.5°	1386.5	1413.7	1360.9	1279.4	1247.7
30°	1348.8	1368.4	1280.9	1188.9	1158.7
32.5°	1309.6	1314.1	1199.4	1102.9	1069.7
35°	1265.8	1252.2	1114.9	1018.4	989.7
37.5°	1216.0	1179.8	1035.0	933.9	902.2
40°	1160.2	1102.9	950.5	849.4	817.7
42.5°	1098.4	1022.9	870.5	769.5	736.3
45°	1029.0	944.5	789.1	691.0	659.3
47.5°	953.5	869.0	712.1	617.1	591.4
50°	870.5	789.1	641.2	546.2	513.0
52.5°	786.0	715.1	571.8	473.7	425.5
55°	710.6	641.2	505.4	396.8	371.1
57.5°	630.6	568.8	445.1	342.5	321.4
60°	555.2	502.4	383.2	300.2	279.1
62.5°	482.8	437.5	322.9	261.0	244.4
65°	410.4	375.7	279.1	224.8	209.7
67.5°	339.5	316.8	239.9	190.1	179.5
70°	271.6	265.5	200.7	161.4	153.9
72.5°	212.7	217.3	162.9	134.3	129.8
75°	159.9	172.0	131.3	110.1	107.1
77.5°	116.2	134.3	102.6	86.0	83.0
80°	80.0	98.1	75.4	63.4	63.4
82.5°	49.8	63.4	48.3	43.8	43.8
85°	27.2	34.7	28.7	19.6	18.1
87.5°	9.1	13.6	6.0	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P845648

CATALOG NUMBER: SQ2R-PW1-075D-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	22.22	23.73	22.59	24.04	24.35	18.73	20.23	19.09	20.54	20.86
	3H	23.60	24.94	23.97	25.27	25.63	19.98	21.32	20.36	21.65	22.01
	4H	24.00	25.26	24.40	25.61	25.99	20.45	21.71	20.85	22.06	22.44
	6H	24.23	25.40	24.65	25.76	26.16	20.80	21.96	21.21	22.33	22.72
	8H	24.28	25.39	24.71	25.78	26.18	20.89	22.00	21.32	22.39	22.79
	12H	24.30	25.36	24.73	25.74	26.17	20.92	21.98	21.35	22.36	22.79
4H	2H	22.40	23.66	22.80	24.01	24.39	19.48	20.74	19.88	21.09	21.47
	3H	24.01	25.05	24.42	25.45	25.85	20.93	21.97	21.34	22.37	22.77
	4H	24.54	25.48	24.97	25.89	26.33	21.50	22.43	21.93	22.85	23.29
	6H	24.91	25.72	25.36	26.16	26.62	21.93	22.75	22.39	23.19	23.65
	8H	25.00	25.76	25.46	26.20	26.67	22.05	22.81	22.51	23.25	23.72
	12H	25.04	25.72	25.52	26.20	26.67	22.10	22.78	22.58	23.26	23.73
8H	4H	24.62	25.38	25.09	25.83	26.30	21.87	22.63	22.33	23.07	23.54
	6H	25.08	25.71	25.58	26.20	26.68	22.39	23.02	22.89	23.51	23.99
	8H	25.23	25.79	25.75	26.30	26.79	22.56	23.12	23.07	23.63	24.12
	12H	25.33	25.82	25.84	26.32	26.88	22.65	23.14	23.16	23.64	24.20
12H	4H	24.61	25.29	25.09	25.77	26.24	21.91	22.59	22.39	23.07	23.54
	6H	25.08	25.64	25.59	26.15	26.64	22.46	23.02	22.97	23.53	24.02
	8H	25.27	25.76	25.78	26.26	26.82	22.67	23.17	23.18	23.66	24.23