

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: P845528

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

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845528
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-075D-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

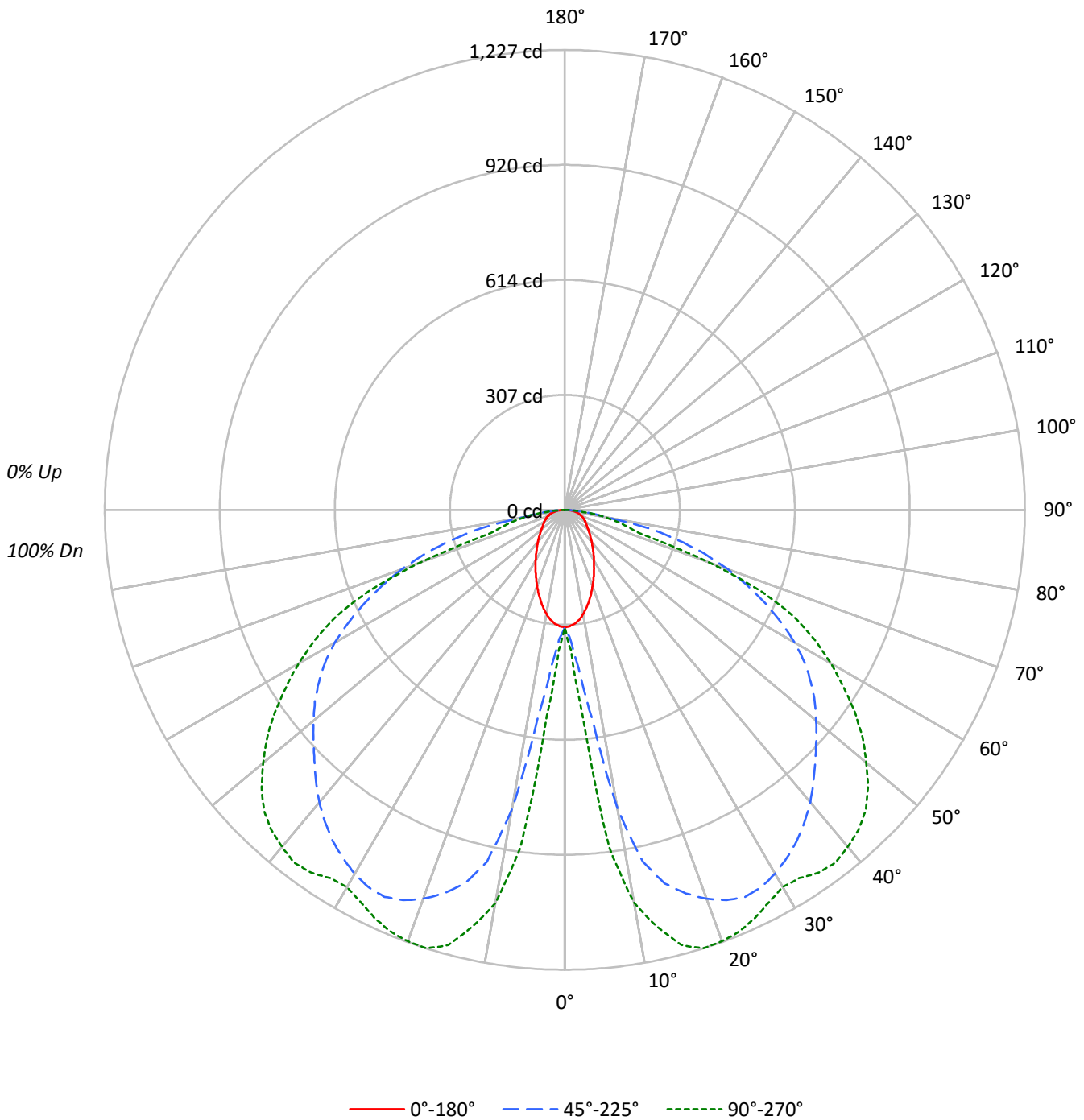
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3107.6 lumens
Efficiency: N/A
Efficacy: 116.4 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): 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: P845528
CATALOG NUMBER: SQ2R-FB-075D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845528

CATALOG NUMBER: SQ2R-FB-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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69				69
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57				57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48				48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41				41
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35				35
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31				31
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27				27
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24				24
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21				21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5067	5067	5067
5°	4940	6846	8974
10°	4625	13259	17464
15°	4186	17250	20099
20°	3706	18976	21050
25°	3280	20293	21394
30°	2897	20899	21658
35°	2588	21262	23284
40°	2352	21465	24740
45°	2169	21566	25907
50°	2047	21981	26377
55°	1996	22550	26587
60°	2047	22850	26453
65°	2132	22537	25708
70°	2209	21796	19445
75°	2445	19576	10730
80°	2529	10098	9958
85°	2519	6984	4187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 26587 cd/sqm



TEST NUMBER: P845528

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.7	1.7
10°-20°	240.9	7.8
20°-30°	424.0	13.6
30°-40°	548.4	17.6
40°-50°	604.9	19.5
50°-60°	564.2	18.2
60°-70°	436.6	14.1
70°-80°	199.6	6.4
80°-90°	37.3	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°	716.6	23.1
0°-40°	1265.0	40.7
0°-60°	2434.1	78.3
0°-90°	3107.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3107.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	314	314	314	314	314	
5°	305	350	422	514	554	28
15°	250	499	1032	1154	1202	70
25°	184	674	1139	1189	1201	85
35°	131	652	1079	1115	1181	83
45°	95	499	944	1083	1135	74
55°	71	297	801	920	944	64
65°	56	168	590	661	673	55
75°	39	103	314	169	172	40
85°	14	30	38	26	23	15
90°	0	0	0	0	0	



TEST NUMBER: P845528

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	313.8	313.8	313.8	313.8	313.8
2.5°	310.8	327.4	345.5	366.6	375.7
5°	304.8	350.0	422.4	514.5	553.7
7.5°	295.7	378.7	565.8	820.7	908.2
10°	282.1	410.4	808.7	1022.9	1065.2
12.5°	267.0	452.6	961.1	1095.3	1139.1
15°	250.4	499.4	1032.0	1154.2	1202.4
17.5°	233.9	550.7	1072.7	1197.9	1226.6
20°	215.7	605.0	1104.4	1208.5	1225.1
22.5°	199.2	645.7	1127.0	1199.4	1217.5
25°	184.1	674.4	1139.1	1188.9	1200.9
27.5°	169.0	685.0	1134.6	1169.3	1179.8
30°	155.4	681.9	1121.0	1145.1	1161.7
32.5°	143.3	672.9	1101.4	1124.0	1164.7
35°	131.3	651.8	1078.7	1114.9	1181.3
37.5°	120.7	621.6	1050.1	1119.5	1185.9
40°	111.6	586.9	1018.4	1119.5	1173.8
42.5°	102.6	546.2	982.2	1104.4	1158.7
45°	95.0	499.4	944.5	1083.3	1134.6
47.5°	87.5	448.1	909.8	1057.6	1096.8
50°	81.5	395.3	875.1	1019.9	1050.1
52.5°	75.4	344.0	840.4	974.6	1001.8
55°	70.9	297.2	801.1	920.3	944.5
57.5°	66.4	255.0	758.9	863.0	882.6
60°	63.4	221.8	707.6	799.6	819.2
62.5°	58.8	191.6	650.3	733.2	751.3
65°	55.8	167.5	589.9	660.8	672.9
67.5°	51.3	147.9	526.5	577.8	565.8
70°	46.8	134.3	461.7	476.8	411.9
72.5°	43.8	119.2	390.8	345.5	208.2
75°	39.2	102.6	313.8	169.0	172.0
77.5°	33.2	83.0	230.8	135.8	138.8
80°	27.2	64.9	108.6	105.6	107.1
82.5°	21.1	46.8	66.4	70.9	67.9
85°	13.6	30.2	37.7	25.6	22.6
87.5°	6.0	13.6	7.5	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P845528

CATALOG NUMBER: SQ2R-FB-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	16.53	18.22	16.90	18.53	18.85	25.19	26.87	25.55	27.19	27.50
	3H	17.32	18.85	17.70	19.17	19.53	26.87	28.40	27.25	28.72	29.08
	4H	17.66	19.09	18.06	19.44	19.81	27.09	28.53	27.49	28.87	29.25
	6H	17.91	19.24	18.32	19.61	20.00	27.22	28.55	27.63	28.91	29.30
	8H	17.99	19.26	18.42	19.65	20.05	27.25	28.52	27.67	28.90	29.30
	12H	18.05	19.27	18.48	19.65	20.08	27.24	28.46	27.67	28.84	29.27
4H	2H	20.97	22.40	21.37	22.75	23.13	25.73	27.16	26.12	27.51	27.88
	3H	21.98	23.18	22.39	23.58	23.98	27.63	28.83	28.04	29.23	29.63
	4H	22.31	23.39	22.74	23.80	24.24	27.91	28.99	28.34	29.40	29.84
	6H	22.49	23.43	22.94	23.87	24.33	28.10	29.05	28.55	29.49	29.94
	8H	22.53	23.41	22.99	23.86	24.32	28.15	29.03	28.61	29.47	29.94
	12H	22.56	23.36	23.04	23.83	24.30	28.16	28.95	28.64	29.43	29.90
8H	4H	23.54	24.43	24.00	24.87	25.33	28.09	28.98	28.55	29.42	29.88
	6H	23.82	24.55	24.31	25.04	25.51	28.34	29.07	28.83	29.56	30.03
	8H	23.90	24.56	24.41	25.06	25.55	28.41	29.06	28.92	29.57	30.05
	12H	23.97	24.55	24.48	25.04	25.60	28.44	29.02	28.95	29.51	30.07
12H	4H	23.60	24.39	24.08	24.87	25.34	28.09	28.88	28.57	29.35	29.82
	6H	23.92	24.58	24.43	25.09	25.57	28.33	28.99	28.84	29.49	29.98
	8H	24.07	24.65	24.58	25.14	25.70	28.44	29.01	28.94	29.50	30.06