

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

(formerly Eaton)

Brand: CORELITE

Report Number: P563992

Luminaire Tested: **SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563992
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

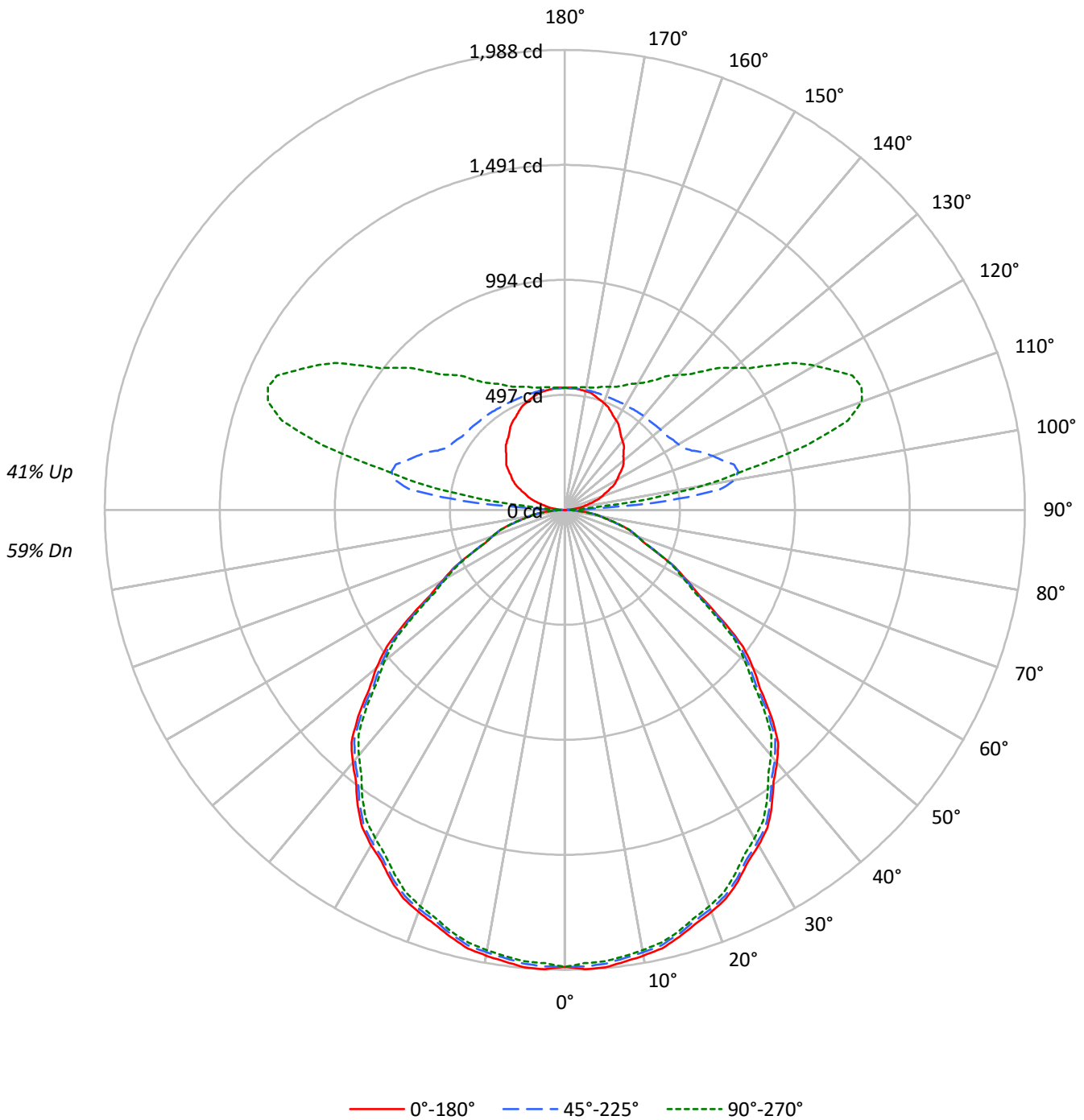
Lumens per Lamp: N/A
Luminaire Lumens: 8384.1 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.1
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: P563992
CATALOG NUMBER: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P563992

CATALOG NUMBER: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8

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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9112	9112	9112
5°	9194	9123	9076
10°	9165	9102	9054
15°	9125	9068	9020
20°	9079	9021	8954
25°	9015	8954	8850
30°	8918	8855	8727
35°	8786	8710	8585
40°	8586	8494	8340
45°	8236	8092	7925
50°	7620	7437	7289
55°	6651	6500	6363
60°	5604	5557	5447
65°	4848	4866	4829
70°	4452	4475	4475
75°	4276	4276	4306
80°	4022	4067	4022
85°	3245	3604	3604



TEST NUMBER: P563992

CATALOG NUMBER: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.8	2.2
10°-20°	534.4	6.4
20°-30°	806.1	9.6
30°-40°	960.5	11.5
40°-50°	946.9	11.3
50°-60°	723.7	8.6
60°-70°	447.9	5.3
70°-80°	254.4	3.0
80°-90°	79.4	0.9
90°-100°	253.2	3.0
100°-110°	687.8	8.2
110°-120°	707.2	8.4
120°-130°	565.4	6.7
130°-140°	444.3	5.3
140°-150°	340.7	4.1
150°-160°	245.0	2.9
160°-170°	149.8	1.8
170°-180°	50.5	0.6
0°-30°	1527.4	18.2
0°-40°	2487.8	29.7
0°-60°	4158.5	49.6
0°-90°	4940.1	58.9
90°-120°	1648.3	19.7
90°-150°	2998.6	35.8
90°-180°	3444.0	41.1
0°-180°	8384.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1975	1975	1975	1975	1975	
5°	1986	1964	1970	1963	1960	188
15°	1911	1891	1899	1892	1889	539
25°	1771	1750	1759	1740	1739	815
35°	1560	1542	1547	1526	1524	974
45°	1262	1246	1240	1218	1215	967
55°	827	814	808	794	791	741
65°	444	441	446	442	442	450
75°	240	240	240	242	242	253
85°	61	65	68	68	68	71
90°	2	7	12	15	15	5
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	

TEST NUMBER: P563992

CATALOG NUMBER: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1975.3	1975.3	1975.3	1975.3	1975.3
2.5°	1987.6	1970.3	1975.3	1971.0	1961.7
5°	1985.5	1963.9	1970.2	1963.3	1960.0
7.5°	1970.2	1948.9	1955.3	1948.4	1946.4
10°	1956.6	1936.6	1943.0	1936.1	1932.8
12.5°	1941.6	1920.3	1928.0	1919.8	1916.5
15°	1910.7	1890.7	1898.8	1891.9	1888.6
17.5°	1876.6	1855.4	1863.4	1855.5	1851.1
20°	1849.4	1829.5	1837.5	1825.6	1823.9
22.5°	1819.5	1799.5	1807.6	1791.6	1791.2
25°	1771.2	1749.5	1759.2	1740.5	1738.8
27.5°	1713.7	1693.7	1701.7	1682.6	1680.6
30°	1674.2	1654.2	1662.3	1641.8	1638.4
32.5°	1629.3	1610.6	1617.4	1596.9	1594.9
35°	1560.2	1541.9	1546.6	1526.1	1524.5
37.5°	1481.6	1464.9	1467.6	1445.1	1443.5
40°	1425.8	1409.1	1410.5	1386.6	1384.9
42.5°	1364.5	1347.9	1346.5	1322.6	1321.0
45°	1262.4	1245.8	1240.3	1218.1	1214.8
47.5°	1146.1	1129.4	1119.2	1101.1	1098.8
50°	1061.7	1045.0	1036.2	1020.7	1015.7
52.5°	970.5	953.8	946.3	932.3	927.3
55°	826.9	813.6	808.2	794.5	791.2
57.5°	690.4	681.4	679.9	666.6	665.2
60°	607.4	602.4	602.3	590.4	590.4
62.5°	536.6	533.0	535.6	527.7	526.4
65°	444.1	440.7	445.8	442.4	442.4
67.5°	370.9	370.9	374.0	372.6	372.6
70°	330.1	330.1	331.8	331.8	331.8
72.5°	293.3	292.0	296.4	296.4	295.0
75°	239.9	239.9	239.9	241.6	241.6
77.5°	186.8	187.1	188.5	188.1	186.8
80°	151.4	153.1	153.1	151.4	151.4
82.5°	116.0	117.7	117.7	117.4	116.0
85°	61.3	64.6	68.1	68.1	68.1
87.5°	18.0	24.4	29.6	30.2	28.9
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3



TEST NUMBER: P563992

CATALOG NUMBER: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)