

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: P564664

Luminaire Tested: **SQ4-PW1-050U-075D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564664
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-075D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

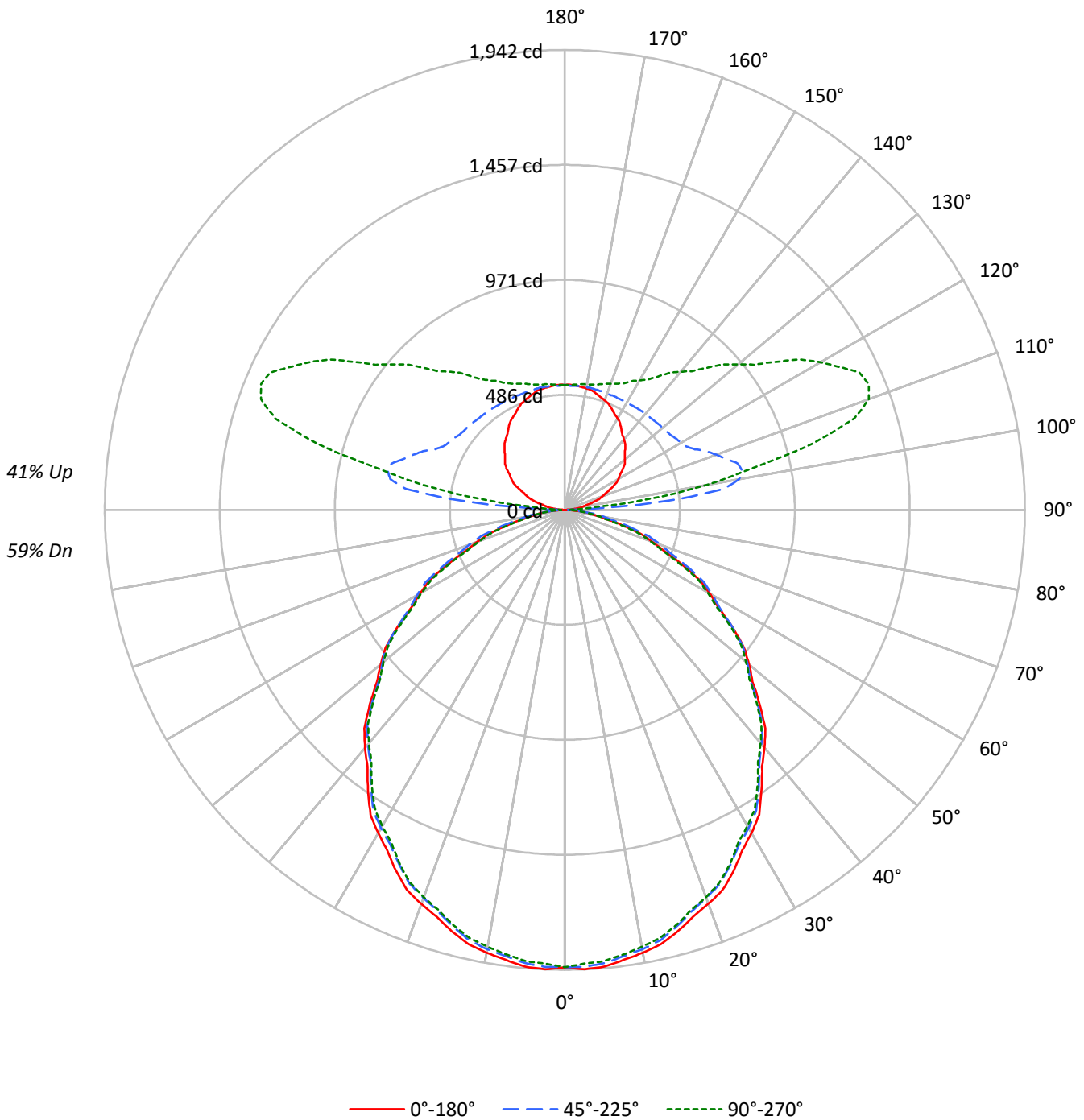
Lumens per Lamp: N/A
Luminaire Lumens: 8359.2 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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



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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	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	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8908	8908	8908
5°	8966	8895	8856
10°	8894	8823	8775
15°	8800	8703	8670
20°	8695	8561	8544
25°	8574	8418	8392
30°	8392	8266	8211
35°	8154	8039	7991
40°	7900	7777	7746
45°	7593	7492	7459
50°	7277	7216	7167
55°	6938	6938	6828
60°	6515	6640	6405
65°	5962	6259	5813
70°	5255	5761	5117
75°	4488	5155	4367
80°	3480	4338	3525
85°	2249	3335	2969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	2.2
10°-20°	513.4	6.1
20°-30°	761.5	9.1
30°-40°	891.1	10.7
40°-50°	887.1	10.6
50°-60°	766.0	9.2
60°-70°	551.4	6.6
70°-80°	289.2	3.5
80°-90°	73.7	0.9
90°-100°	253.2	3.0
100°-110°	687.8	8.2
110°-120°	707.2	8.5
120°-130°	565.4	6.8
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°	1456.8	17.4
0°-40°	2347.8	28.1
0°-60°	4001.0	47.9
0°-90°	4915.2	58.8
90°-120°	1648.3	19.7
90°-150°	2998.6	35.9
90°-180°	3444.0	41.2
0°-180°	8359.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1936	1915	1921	1916	1912	183
15°	1843	1819	1822	1819	1815	519
25°	1684	1656	1654	1644	1649	775
35°	1448	1428	1428	1414	1419	905
45°	1164	1154	1148	1145	1143	898
55°	863	861	863	851	849	770
65°	546	563	573	551	532	541
75°	252	275	289	270	245	270
85°	42	56	63	60	56	56
90°	2	7	12	15	15	4
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.1	1931.1	1931.1	1931.1	1931.1
2.5°	1942.0	1926.0	1931.1	1926.8	1917.5
5°	1936.2	1914.6	1920.9	1915.7	1912.4
7.5°	1916.5	1896.5	1901.2	1895.7	1893.7
10°	1898.8	1878.8	1883.5	1876.6	1873.2
12.5°	1878.4	1857.1	1861.7	1854.8	1852.8
15°	1842.6	1819.3	1822.2	1818.7	1815.4
17.5°	1801.1	1777.5	1778.0	1772.5	1771.8
20°	1771.2	1746.2	1743.9	1737.2	1740.5
22.5°	1738.5	1712.2	1709.9	1700.5	1705.1
25°	1684.4	1656.1	1653.8	1643.7	1648.7
27.5°	1621.8	1593.8	1593.9	1579.7	1585.0
30°	1575.5	1548.9	1551.7	1534.8	1541.5
32.5°	1526.5	1502.5	1504.0	1487.2	1493.8
35°	1447.9	1427.9	1427.5	1414.0	1419.0
37.5°	1367.6	1350.0	1347.2	1339.4	1340.7
40°	1311.8	1296.8	1291.4	1286.3	1286.3
42.5°	1253.3	1239.6	1234.2	1230.4	1229.1
45°	1163.8	1153.8	1148.4	1145.0	1143.3
47.5°	1075.3	1066.0	1061.3	1058.9	1057.3
50°	1014.0	1007.4	1005.5	1000.4	998.7
52.5°	952.8	948.8	947.0	940.5	938.8
55°	862.6	860.9	862.6	850.7	849.0
57.5°	768.7	771.4	776.9	760.8	756.8
60°	706.1	712.7	719.7	700.8	694.2
62.5°	642.1	652.8	662.5	640.9	631.6
65°	546.2	562.8	573.4	550.8	532.5
67.5°	453.6	474.2	486.9	462.7	442.0
70°	389.6	412.9	427.1	402.7	379.4
72.5°	333.8	359.8	371.2	348.3	325.0
75°	251.8	275.1	289.2	270.0	245.0
77.5°	178.6	200.6	212.3	195.5	174.9
80°	131.0	154.3	163.3	149.3	132.7
82.5°	92.9	112.2	118.4	110.0	98.7
85°	42.5	55.8	63.0	59.5	56.1
87.5°	11.2	21.5	28.2	28.9	30.3
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



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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)