

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: P564434

Luminaire Tested: **SQ4-PR1-150U-050D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564434  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PR1-150U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

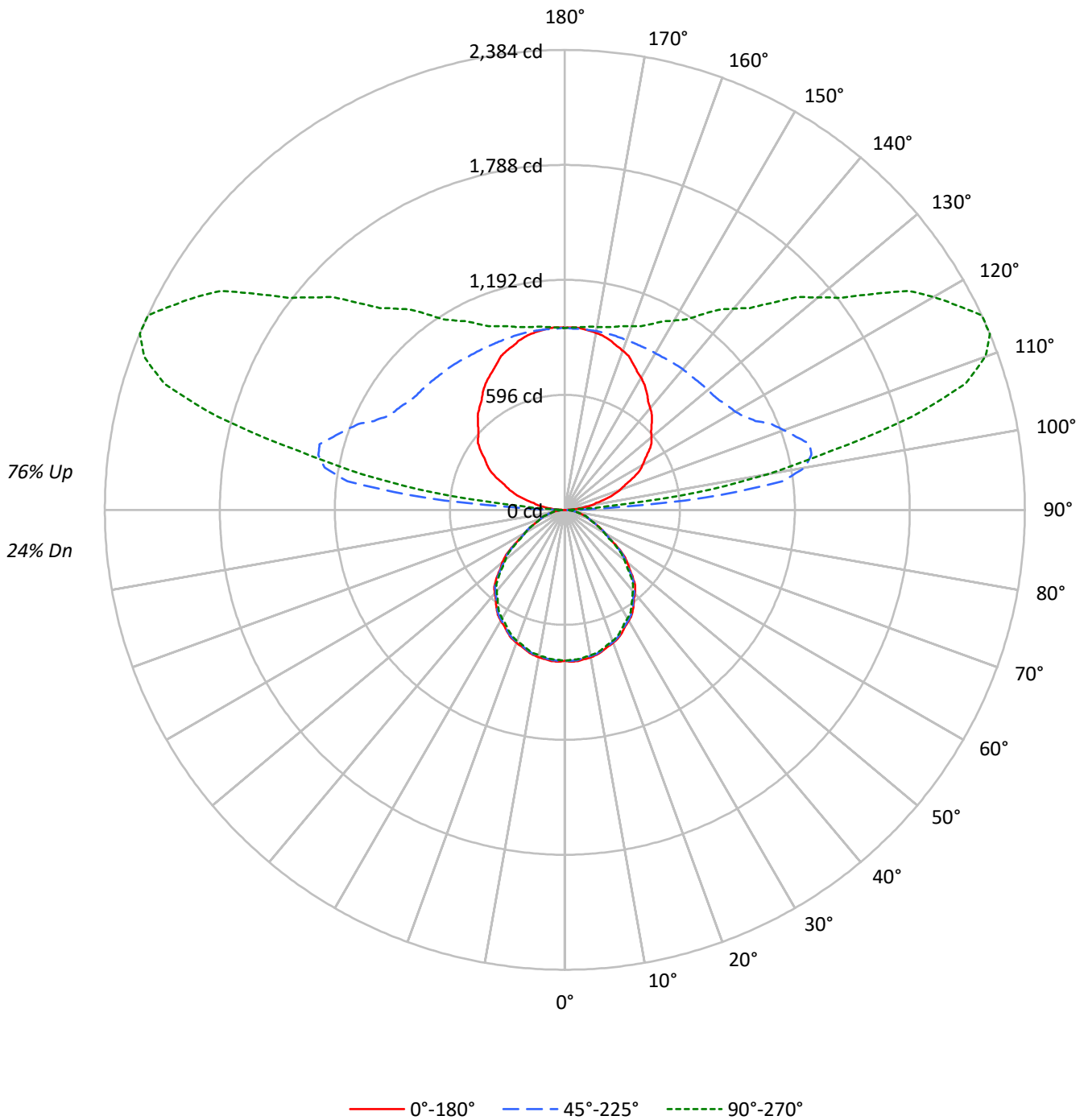
Lumens per Lamp: N/A  
Luminaire Lumens: 8043.8 lumens  
Efficiency: N/A  
Efficacy: 144.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.7  
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



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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7232	7195
10°	7265	7215	7177
15°	7233	7189	7150
20°	7198	7151	7098
25°	7146	7099	7016
30°	7070	7020	6918
35°	6965	6904	6805
40°	6806	6734	6611
45°	6529	6414	6283
50°	6040	5895	5779
55°	5273	5152	5044
60°	4443	4405	4318
65°	3842	3858	3827
70°	3528	3547	3547
75°	3390	3390	3415
80°	3188	3225	3188
85°	2572	2858	2858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.0	0.9
10°-20°	211.8	2.6
20°-30°	319.5	4.0
30°-40°	380.7	4.7
40°-50°	375.3	4.7
50°-60°	286.9	3.6
60°-70°	177.5	2.2
70°-80°	100.8	1.3
80°-90°	32.6	0.4
90°-100°	438.6	5.5
100°-110°	1185.8	14.7
110°-120°	1246.8	15.5
120°-130°	1012.7	12.6
130°-140°	794.4	9.9
140°-150°	609.7	7.6
150°-160°	438.5	5.5
160°-170°	267.9	3.3
170°-180°	90.3	1.1
0°-30°	605.4	7.5
0°-40°	986.1	12.3
0°-60°	1648.3	20.5
0°-90°	1959.3	24.4
90°-120°	2871.2	35.7
90°-150°	5287.9	65.7
90°-180°	6085.0	75.6
0°-180°	8043.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	787	778	781	778	777	75
15°	757	749	753	750	749	214
25°	702	694	697	690	689	323
35°	618	611	613	605	604	386
45°	500	494	492	483	482	383
55°	328	322	320	315	314	294
65°	176	175	177	175	175	178
75°	95	95	95	96	96	100
85°	24	26	27	27	27	28
90°	2	6	13	14	13	6
95°	68	239	729	378	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	



TEST NUMBER: P564434

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	783.0	783.0	783.0	783.0	783.0
2.5°	787.8	781.0	783.0	781.3	777.6
5°	787.0	778.4	780.9	778.2	776.9
7.5°	780.9	772.5	775.0	772.3	771.5
10°	775.5	767.6	770.1	767.4	766.1
12.5°	769.6	761.2	764.2	760.9	759.6
15°	757.3	749.4	752.6	749.9	748.6
17.5°	743.8	735.4	738.6	735.4	733.7
20°	733.1	725.1	728.3	723.6	722.9
22.5°	721.2	713.3	716.5	710.1	710.0
25°	702.0	693.5	697.3	689.9	689.2
27.5°	679.2	671.3	674.5	666.9	666.2
30°	663.6	655.7	658.9	650.7	649.4
32.5°	645.8	638.4	641.1	633.0	632.2
35°	618.4	611.2	613.0	604.9	604.2
37.5°	587.3	580.7	581.7	572.8	572.1
40°	565.1	558.5	559.1	549.6	548.9
42.5°	540.9	534.3	533.7	524.3	523.6
45°	500.4	493.8	491.6	482.8	481.5
47.5°	454.3	447.7	443.6	436.4	435.5
50°	420.8	414.2	410.7	404.6	402.6
52.5°	384.7	378.1	375.1	369.5	367.5
55°	327.8	322.5	320.3	314.9	313.6
57.5°	273.7	270.1	269.5	264.2	263.7
60°	240.8	238.8	238.7	234.0	234.0
62.5°	212.7	211.2	212.3	209.2	208.7
65°	176.0	174.7	176.7	175.3	175.3
67.5°	147.0	147.0	148.2	147.7	147.7
70°	130.8	130.8	131.5	131.5	131.5
72.5°	116.3	115.7	117.5	117.5	116.9
75°	95.1	95.1	95.1	95.8	95.8
77.5°	74.0	74.2	74.7	74.6	74.0
80°	60.0	60.7	60.7	60.0	60.0
82.5°	46.0	46.7	46.7	46.5	46.0
85°	24.3	25.6	27.0	27.0	27.0
87.5°	7.4	10.3	13.4	13.6	12.9
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.4	377.5	224.5
97.5°	109.3	274.0	1136.9	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.0
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.8	2207.0	2319.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.1	474.5	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.8
120°	465.3	544.7	1018.9	1892.6	2207.5
122.5°	492.9	570.8	1002.6	1794.3	2111.6
125°	531.3	608.8	983.3	1659.4	1949.4
127.5°	566.6	642.7	972.0	1549.3	1804.4
130°	586.1	664.6	967.1	1481.3	1711.7
132.5°	606.5	684.1	962.2	1419.9	1632.1
135°	636.9	712.4	956.9	1339.9	1516.7
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.7	755.3	950.8	1233.1	1361.2
142.5°	709.1	771.6	947.6	1195.4	1307.6
145°	740.6	796.2	943.7	1146.9	1234.3
147.5°	769.2	818.5	939.3	1102.9	1170.1
150°	790.3	834.0	937.6	1079.0	1132.7
152.5°	809.8	848.0	936.8	1056.9	1101.0
155°	836.0	868.8	935.6	1028.8	1062.6
157.5°	863.3	886.1	935.8	1009.2	1031.5
160°	878.7	897.6	936.6	996.9	1012.8
162.5°	890.9	906.6	937.4	987.1	999.0
165°	910.2	919.1	939.7	976.3	981.3
167.5°	923.4	929.6	939.9	967.1	969.5
170°	931.5	934.5	940.7	963.0	963.0
172.5°	938.0	938.6	940.7	958.1	957.3
175°	944.7	943.8	940.7	952.8	950.8
177.5°	947.0	944.6	940.5	948.6	946.2
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)