

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: P854152

Luminaire Tested: SQ2-PP3-150U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854152
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-150U-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

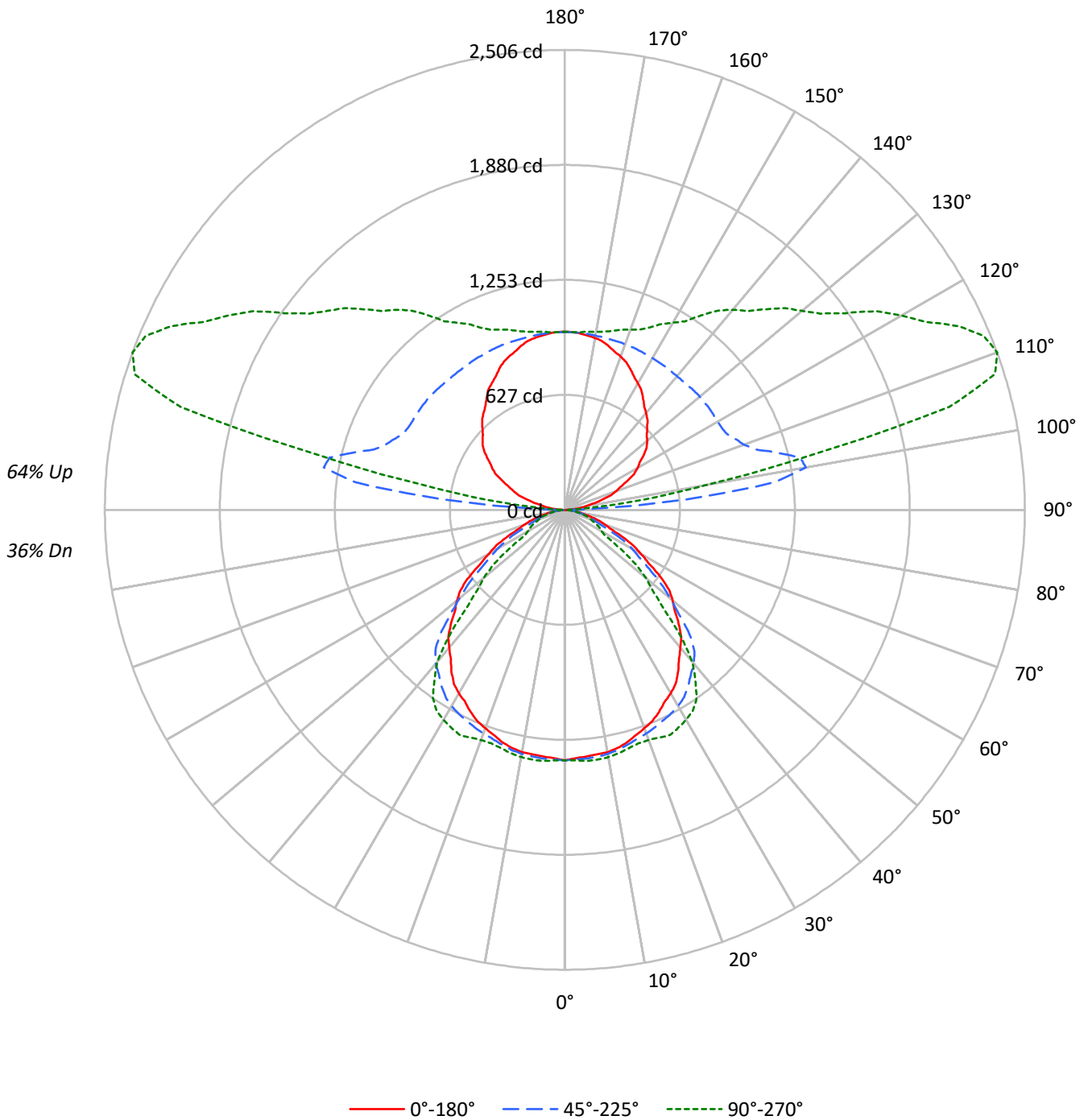
Lumens per Lamp: N/A
Luminaire Lumens: 9422.7 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.3
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	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36				36
1	95	91	87	84	86	83	80	77	67	65	63	53	51	50	39	38	38	32				32
2	87	80	74	69	79	73	68	64	59	56	53	47	44	42	35	34	32	27				27
3	79	70	64	58	72	64	58	53	52	48	45	41	39	36	31	29	28	23				23
4	73	62	55	49	66	57	51	45	47	42	38	37	34	31	28	26	24	20				20
5	67	56	48	42	60	51	44	39	42	37	33	33	30	27	25	23	21	18				18
6	62	50	42	37	56	46	39	34	38	33	29	30	26	24	23	21	19	16				16
7	57	45	37	32	51	41	35	30	34	29	25	27	24	21	21	19	17	14				14
8	53	41	33	28	48	37	31	26	31	26	22	25	21	19	19	17	15	12				12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	18	15	13	11				11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10				10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22034	22034	22034
5°	21861	22049	22258
10°	21972	22138	22422
15°	21919	22136	22474
20°	21763	22283	22928
25°	21640	22564	24132
30°	21517	23021	24636
35°	21212	23089	24681
40°	20645	23048	22803
45°	20027	22003	17358
50°	19241	18771	14458
55°	17909	15797	10396
60°	15419	13556	7453
65°	13005	10472	7331
70°	10829	8242	7015
75°	9177	7112	6569
80°	7782	6174	5904
85°	6150	5076	3205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 22003 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	1.4
10°-20°	376.1	4.0
20°-30°	589.2	6.3
30°-40°	726.8	7.7
40°-50°	684.3	7.3
50°-60°	484.5	5.1
60°-70°	276.1	2.9
70°-80°	136.6	1.4
80°-90°	34.5	0.4
90°-100°	369.5	3.9
100°-110°	1209.8	12.8
110°-120°	1196.0	12.7
120°-130°	977.7	10.4
130°-140°	797.9	8.5
140°-150°	620.9	6.6
150°-160°	447.1	4.7
160°-170°	273.5	2.9
170°-180°	92.4	1.0
0°-30°	1095.2	11.6
0°-40°	1822.0	19.3
0°-60°	2990.8	31.7
0°-90°	3437.9	36.5
90°-120°	2775.3	29.5
90°-150°	5171.8	54.9
90°-180°	5985.0	63.5
0°-180°	9422.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1349	1373	1360	1364	1373	128
15°	1311	1330	1324	1337	1344	370
25°	1215	1246	1267	1318	1355	559
35°	1076	1106	1171	1238	1252	671
45°	877	943	964	817	760	675
55°	636	674	561	423	369	561
65°	340	359	274	193	192	342
75°	147	163	114	107	105	159
85°	33	30	27	22	17	39
90°	1	3	8	7	8	4
95°	52	150	672	239	156	59
105°	210	300	1201	2282	2168	222
115°	379	453	976	2016	2367	374
125°	527	588	962	1590	1868	469
135°	635	702	954	1371	1546	491
145°	742	797	952	1180	1292	465
155°	846	874	958	1055	1096	390
165°	924	933	962	999	1010	260
175°	966	966	967	974	972	92
180°	970	970	970	970	970	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.7	1364.7	1364.7	1364.7	1364.7
2.5°	1354.3	1373.5	1361.2	1363.6	1365.8
5°	1348.8	1372.8	1360.4	1363.5	1373.3
7.5°	1343.6	1368.2	1356.0	1361.2	1373.3
10°	1340.2	1361.3	1350.3	1357.7	1367.6
12.5°	1329.8	1349.8	1339.9	1349.6	1358.3
15°	1311.3	1329.6	1324.3	1337.4	1344.5
17.5°	1286.2	1308.5	1308.4	1327.1	1334.4
20°	1266.6	1293.4	1296.9	1320.3	1334.4
22.5°	1245.8	1277.1	1283.0	1318.2	1342.5
25°	1214.7	1245.7	1266.6	1317.9	1354.6
27.5°	1178.3	1209.0	1252.2	1309.7	1338.7
30°	1154.1	1183.7	1234.8	1294.6	1321.4
32.5°	1124.1	1154.8	1209.5	1273.8	1298.3
35°	1076.2	1105.8	1171.4	1238.1	1252.2
37.5°	1021.1	1054.6	1128.1	1165.3	1166.2
40°	979.5	1023.2	1093.5	1100.3	1081.9
42.5°	939.1	995.3	1045.0	1014.6	933.1
45°	877.1	943.4	963.6	816.7	760.2
47.5°	811.0	876.5	844.2	684.9	646.0
50°	766.0	828.1	747.3	612.3	575.6
52.5°	715.2	770.5	660.7	542.6	486.7
55°	636.2	674.3	561.2	422.9	369.3
57.5°	541.0	567.8	479.8	317.4	257.4
60°	477.5	498.7	419.8	260.4	230.8
62.5°	419.8	438.7	357.5	226.2	215.8
65°	340.4	358.8	274.1	193.3	191.9
67.5°	270.9	290.9	210.3	168.7	167.1
70°	229.4	250.5	174.6	151.4	148.6
72.5°	194.7	214.8	148.0	133.0	131.3
75°	147.1	162.7	114.0	106.7	105.3
77.5°	106.8	116.6	84.8	81.0	79.6
80°	83.7	87.9	66.4	64.9	63.5
82.5°	62.9	61.5	50.2	48.7	46.2
85°	33.2	30.4	27.4	21.5	17.3
87.5°	10.6	11.0	6.2	4.9	5.1
90°	1.0	2.9	8.0	7.0	8.0
92.5°	16.9	61.8	189.7	61.7	49.4
95°	51.8	150.2	671.7	239.3	155.5
97.5°	94.1	198.1	1152.4	697.1	432.1
100°	123.6	223.0	1333.4	1190.7	789.3
102.5°	157.1	254.1	1313.5	1754.5	1360.1
105°	210.3	299.9	1200.8	2281.5	2167.5
107.5°	262.7	344.9	1091.0	2330.8	2456.1
110°	297.0	376.9	1038.4	2273.4	2506.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.7	407.2	1006.5	2173.7	2472.0
115°	378.7	452.7	975.6	2016.0	2366.8
117.5°	426.3	495.5	963.9	1861.1	2217.3
120°	457.4	522.7	960.7	1770.8	2117.7
122.5°	485.3	549.0	960.7	1692.9	2014.8
125°	527.2	587.6	961.7	1589.8	1867.5
127.5°	562.7	624.2	960.5	1513.9	1755.5
130°	585.0	647.3	959.7	1467.9	1686.2
132.5°	604.9	668.8	957.3	1428.4	1626.4
135°	634.8	702.0	953.7	1371.2	1545.6
137.5°	666.3	732.9	951.5	1311.7	1469.3
140°	688.6	752.9	950.7	1274.0	1423.1
142.5°	710.9	771.4	950.7	1233.8	1368.9
145°	742.4	797.0	951.7	1179.5	1292.5
147.5°	775.5	820.9	953.1	1132.2	1217.6
150°	796.2	836.2	954.7	1104.8	1176.9
152.5°	817.0	852.2	955.5	1082.2	1141.8
155°	846.1	874.3	957.7	1055.3	1096.2
157.5°	872.2	892.6	959.9	1034.1	1063.7
160°	888.9	905.5	960.7	1022.0	1045.4
162.5°	903.3	916.7	960.7	1012.3	1029.4
165°	923.8	932.6	961.7	998.8	1009.5
167.5°	941.1	945.4	962.9	988.3	994.2
170°	950.7	952.7	963.7	982.6	984.6
172.5°	957.9	959.1	966.1	978.6	979.0
175°	965.7	965.7	966.7	973.6	971.6
177.5°	969.6	968.9	968.0	972.8	969.6
180°	969.6	969.6	969.6	969.6	969.6



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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	16.88	17.61	17.95	18.68	20.13	13.27	14.01	14.35	15.07	16.53
	3H	17.96	18.62	19.04	19.69	21.17	14.37	15.02	15.45	16.10	17.57
	4H	18.30	18.92	19.39	20.00	21.48	14.82	15.44	15.92	16.52	18.00
	6H	18.51	19.08	19.61	20.16	21.65	15.16	15.73	16.26	16.81	18.31
	8H	18.55	19.09	19.66	20.19	21.68	15.25	15.79	16.35	16.88	18.37
	12H	18.56	19.08	19.67	20.17	21.68	15.26	15.77	16.36	16.86	18.37
4H	2H	16.97	17.59	18.07	18.67	20.15	13.97	14.59	15.07	15.67	17.15
	3H	18.27	18.78	19.37	19.89	21.38	15.21	15.72	16.31	16.83	18.32
	4H	18.74	19.21	19.84	20.30	21.81	15.76	16.23	16.87	17.33	18.84
	6H	19.07	19.47	20.18	20.59	22.09	16.19	16.60	17.31	17.71	19.22
	8H	19.16	19.53	20.27	20.64	22.16	16.31	16.69	17.43	17.80	19.32
	12H	19.19	19.53	20.32	20.65	22.18	16.33	16.67	17.47	17.80	19.32
8H	4H	18.74	19.12	19.86	20.23	21.75	16.02	16.40	17.14	17.51	19.03
	6H	19.17	19.48	20.31	20.63	22.15	16.56	16.87	17.70	18.03	19.55
	8H	19.33	19.60	20.47	20.73	22.27	16.75	17.02	17.89	18.15	19.69
	12H	19.41	19.65	20.56	20.78	22.35	16.82	17.06	17.97	18.19	19.76
12H	4H	18.70	19.04	19.83	20.16	21.69	16.03	16.37	17.16	17.49	19.01
	6H	19.16	19.43	20.30	20.56	22.10	16.62	16.89	17.76	18.02	19.56
	8H	19.33	19.56	20.47	20.69	22.27	16.82	17.06	17.97	18.19	19.76