

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P936966

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936966
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

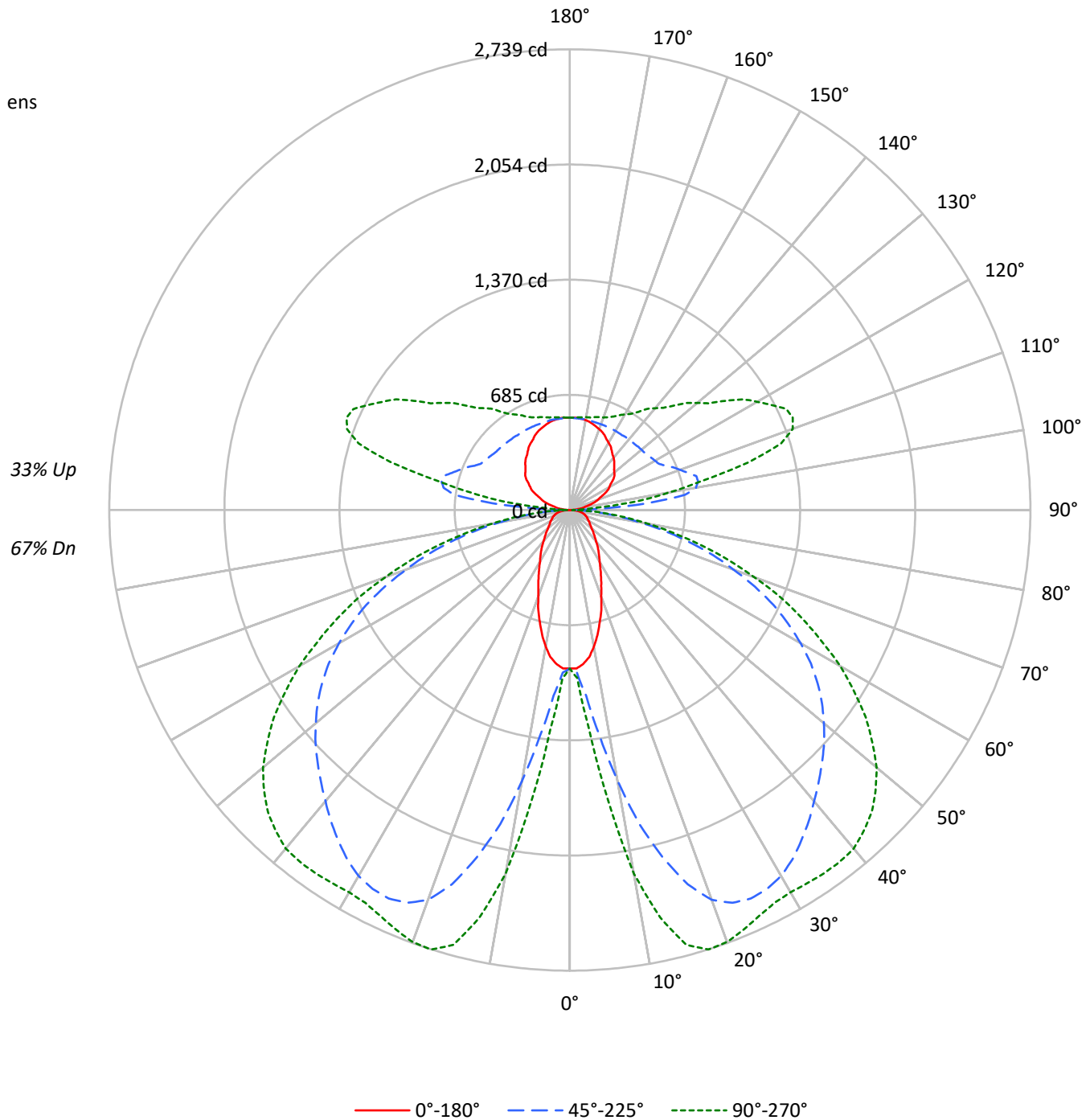
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10857.4 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 112
Input Voltage (V): NR
Input Current (A_{in}): 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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4372	4372	4372
5°	4271	5054	5877
10°	3874	7367	9744
15°	3293	9624	11765
20°	2681	11153	11990
25°	2236	11671	11747
30°	1886	11745	11725
35°	1668	11550	12028
40°	1453	11297	12342
45°	1316	11111	12390
50°	1207	10944	12185
55°	1156	10699	11645
60°	1183	10229	10792
65°	1231	9515	9620
70°	1311	8298	8127
75°	1454	6766	6342
80°	1589	4691	4273
85°	1411	2489	2188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12390 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	1.1
10°-20°	540.3	5.0
20°-30°	945.0	8.7
30°-40°	1216.6	11.2
40°-50°	1358.9	12.5
50°-60°	1301.5	12.0
60°-70°	1031.4	9.5
70°-80°	606.5	5.6
80°-90°	170.6	1.6
90°-100°	268.0	2.5
100°-110°	704.7	6.5
110°-120°	730.7	6.7
120°-130°	586.1	5.4
130°-140°	459.9	4.2
140°-150°	353.0	3.3
150°-160°	254.2	2.3
160°-170°	155.5	1.4
170°-180°	52.6	0.5
0°-30°	1607.2	14.8
0°-40°	2823.8	26.0
0°-60°	5484.1	50.5
0°-90°	7292.6	67.2
90°-120°	1703.5	15.7
90°-150°	3102.5	28.6
90°-180°	3565.0	32.8
0°-180°	10857.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	918	985	1109	1254	1300	85
15°	688	1270	2139	2594	2676	191
25°	439	1439	2548	2661	2664	202
35°	297	1376	2400	2536	2636	185
45°	203	1097	2121	2430	2539	157
55°	146	697	1800	2091	2148	133
65°	115	370	1336	1503	1524	114
75°	85	227	733	806	809	89
85°	30	70	182	200	203	32
90°	4	10	28	14	14	5
95°	36	139	462	238	162	39
105°	127	192	779	1183	1104	135
115°	226	274	624	1245	1421	223
125°	314	352	568	959	1132	279
135°	374	412	550	774	878	289
145°	434	461	543	661	712	272
155°	490	504	543	596	613	225
165°	529	536	543	564	571	149
175°	550	550	547	554	554	52
180°	550	550	550	550	550	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4	942.4
2.5°	942.4	942.4	948.5	951.5	957.5	960.6	966.7	972.8	990.9	994.0	1000.0
5°	918.1	930.3	969.7	984.8	1027.3	1084.8	1109.1	1148.5	1230.2	1254.5	1269.6
7.5°	881.8	909.1	1006.1	1030.3	1136.3	1287.9	1351.5	1436.3	1566.6	1630.3	1681.8
10°	824.2	881.8	1054.5	1112.1	1284.9	1515.1	1633.3	1751.5	1948.5	2036.4	2069.7
12.5°	760.6	854.6	1106.1	1184.9	1433.3	1769.7	1912.1	2042.4	2266.7	2384.8	2403.0
15°	687.9	815.2	1154.5	1269.6	1590.9	1981.8	2139.3	2300.0	2509.1	2593.9	2615.1
17.5°	624.2	784.8	1200.0	1321.2	1712.1	2172.7	2333.3	2466.7	2636.3	2693.9	2709.0
20°	545.4	736.4	1230.2	1387.8	1839.4	2312.1	2466.7	2569.6	2684.9	2721.2	2727.2
22.5°	487.9	684.8	1248.5	1412.1	1924.2	2396.9	2527.3	2609.0	2687.8	2700.0	2703.0
25°	439.4	627.3	1245.5	1439.4	1997.0	2448.5	2548.5	2609.0	2654.5	2660.6	2660.6
27.5°	393.9	563.6	1233.3	1445.5	2051.5	2460.6	2539.4	2581.8	2603.0	2615.1	2615.1
30°	354.5	503.0	1203.0	1433.3	2075.8	2448.5	2512.1	2533.3	2554.5	2572.7	2581.8
32.5°	324.3	445.4	1157.5	1409.0	2078.7	2418.1	2463.6	2475.7	2506.1	2548.5	2563.6
35°	297.0	387.8	1106.1	1375.7	2060.6	2369.7	2400.0	2412.1	2472.7	2536.3	2557.5
37.5°	269.7	345.4	1039.4	1318.2	2033.3	2312.1	2333.3	2354.5	2448.5	2524.2	2548.5
40°	242.5	309.1	960.6	1254.5	1990.9	2242.4	2260.6	2293.9	2418.1	2506.1	2530.2
42.5°	221.2	278.8	875.8	1187.9	1936.4	2163.6	2190.9	2239.4	2381.8	2475.7	2503.0
45°	203.1	248.4	784.8	1096.9	1866.6	2081.8	2121.2	2187.9	2339.4	2430.3	2454.5
47.5°	184.9	227.2	690.9	1003.0	1790.9	1999.9	2051.5	2127.3	2281.8	2369.7	2390.9
50°	169.7	206.1	597.0	903.0	1709.1	1912.1	1972.7	2051.5	2209.1	2290.9	2318.1
52.5°	157.6	187.8	509.1	803.0	1615.1	1821.2	1890.9	1972.7	2121.2	2200.0	2218.1
55°	145.5	172.7	433.3	697.0	1518.2	1724.2	1800.0	1878.8	2024.2	2090.9	2103.0
57.5°	139.4	160.6	369.7	597.0	1415.1	1615.1	1700.0	1772.7	1909.1	1960.6	1972.7
60°	130.3	151.5	321.2	512.1	1303.0	1512.1	1584.8	1657.6	1772.7	1815.2	1824.2
62.5°	121.2	145.5	284.9	430.3	1187.9	1390.9	1463.7	1530.3	1627.2	1657.6	1669.7
65°	115.1	139.4	257.6	369.7	1069.7	1263.6	1336.3	1393.9	1472.7	1503.0	1509.0
67.5°	109.0	133.3	236.4	318.2	951.5	1136.3	1190.9	1245.5	1306.1	1336.3	1339.4
70°	100.0	127.3	218.2	281.8	830.3	990.9	1036.3	1093.9	1142.4	1157.5	1166.7
72.5°	93.9	118.2	206.1	254.5	706.0	851.5	894.0	927.3	969.7	984.8	984.8
75°	84.9	106.1	193.9	227.2	578.8	697.0	733.4	766.7	800.0	806.0	797.0
77.5°	75.7	93.9	166.7	190.9	451.5	551.5	581.8	600.0	627.3	633.3	636.4
80°	63.7	81.8	130.3	148.4	327.2	406.0	427.2	442.5	466.6	466.6	472.7
82.5°	48.5	63.7	93.9	106.1	221.2	278.8	297.0	306.0	321.2	321.2	321.2
85°	30.3	39.4	60.6	69.7	133.3	169.7	181.8	184.9	197.0	200.0	200.0
87.5°	15.1	21.2	39.4	42.4	69.7	87.9	87.9	93.9	93.9	90.9	87.9
90°	3.7	6.6	9.6	10.3	16.2	24.1	28.0	24.9	18.7	14.1	14.1
92.5°	14.8	39.8	65.0	71.3	100.2	138.7	157.9	138.4	99.4	70.1	67.3
95°	35.5	81.4	127.3	138.8	246.4	389.9	461.7	412.0	312.6	238.1	229.6
97.5°	61.2	101.7	142.3	152.4	331.9	571.2	690.9	659.5	596.6	549.5	533.4
100°	81.2	117.9	154.6	163.8	363.0	628.6	761.4	763.7	768.3	771.7	752.5
102.5°	98.2	132.5	166.7	175.3	377.3	646.7	781.3	821.4	901.4	961.4	945.0
105°	127.0	156.0	185.1	192.3	387.9	648.7	779.1	868.8	1048.3	1182.9	1174.0
107.5°	156.5	183.5	210.6	217.4	389.8	619.8	734.8	859.9	1110.3	1298.0	1300.2
110°	176.4	200.8	225.4	231.4	387.0	594.2	697.9	837.8	1117.6	1327.5	1336.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	196.0	219.3	242.5	248.4	387.0	571.9	664.3	807.5	1093.9	1308.7	1322.8
115°	225.5	247.0	268.5	273.9	390.6	546.3	624.1	762.1	1037.9	1244.8	1264.4
117.5°	254.6	274.1	293.7	298.6	397.9	530.2	596.4	720.9	969.9	1156.7	1178.3
120°	271.6	290.0	308.4	313.0	403.8	524.8	585.4	699.1	926.6	1097.2	1118.2
122.5°	288.2	306.7	325.3	329.9	412.2	522.0	576.8	679.3	884.2	1037.8	1058.6
125°	313.7	330.5	347.5	351.7	423.7	519.6	567.6	654.7	828.7	959.2	978.4
127.5°	334.4	351.4	368.4	372.7	435.1	518.3	559.8	634.6	784.0	896.1	912.2
130°	345.4	363.8	382.2	386.8	443.4	519.1	556.9	623.4	756.4	856.2	871.1
132.5°	356.9	375.2	393.7	398.2	450.3	519.6	554.4	613.9	733.0	822.3	835.6
135°	373.9	390.6	407.3	411.5	457.6	519.1	549.9	599.8	699.5	774.3	785.8
137.5°	391.3	407.8	424.4	428.5	468.7	522.3	549.2	591.4	675.7	738.9	748.3
140°	405.6	420.9	436.1	440.0	475.5	522.9	546.6	583.0	655.8	710.4	719.2
142.5°	416.7	430.7	444.9	448.4	481.1	524.7	546.6	578.6	642.6	690.6	698.2
145°	433.7	446.0	458.3	461.4	488.6	524.8	542.9	569.1	621.4	660.7	666.4
147.5°	450.6	462.6	474.6	477.6	499.3	528.4	542.9	563.5	604.6	635.5	640.2
150°	461.7	472.5	483.4	486.1	505.0	530.3	542.9	560.3	595.1	621.2	625.0
152.5°	473.2	481.4	489.6	491.6	508.7	531.5	542.9	557.8	587.4	609.7	612.7
155°	490.1	496.2	502.3	503.8	516.9	534.2	542.9	554.7	578.3	596.0	598.0
157.5°	502.6	508.5	514.4	516.0	524.9	536.9	542.9	552.0	570.4	584.2	585.5
160°	511.1	515.8	520.4	521.5	528.7	538.2	542.9	550.8	566.5	578.3	579.1
162.5°	519.6	523.1	526.5	527.4	532.6	539.5	542.9	549.5	562.9	572.8	573.5
165°	528.9	532.0	535.0	535.8	538.2	541.3	542.9	547.7	557.2	564.3	565.1
167.5°	537.4	538.8	540.3	540.7	542.6	545.2	546.6	549.7	556.0	560.6	561.0
170°	542.9	544.3	545.9	546.2	546.3	546.5	546.6	549.7	556.0	560.6	560.6
172.5°	545.9	546.2	546.5	546.6	546.6	546.6	546.6	549.1	554.0	557.7	557.4
175°	549.9	549.9	549.9	549.9	548.8	547.3	546.6	548.1	551.2	553.6	553.6
177.5°	549.9	549.9	549.9	549.9	549.0	547.8	547.3	548.6	551.0	552.9	552.5
180°	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	942.4	942.4
2.5°	1006.1	1000.0
5°	1293.9	1300.0
7.5°	1742.4	1739.4
10°	2166.7	2194.0
12.5°	2475.7	2481.8
15°	2663.6	2675.7
17.5°	2736.3	2739.4
20°	2739.4	2733.3
22.5°	2706.1	2700.0
25°	2666.7	2663.6
27.5°	2630.2	2633.3
30°	2615.1	2624.2
32.5°	2615.1	2630.2
35°	2621.2	2636.3
37.5°	2618.2	2636.3
40°	2606.1	2627.3
42.5°	2572.7	2587.9
45°	2521.2	2539.4
47.5°	2454.5	2466.7
50°	2369.7	2381.8
52.5°	2263.6	2266.7
55°	2136.3	2148.5
57.5°	1999.9	2003.0
60°	1848.5	1857.6
62.5°	1687.8	1687.8
65°	1518.2	1524.3
67.5°	1342.4	1357.6
70°	1163.6	1166.7
72.5°	987.9	987.9
75°	806.0	809.1
77.5°	633.3	633.3
80°	469.7	472.7
82.5°	324.3	330.3
85°	203.1	203.1
87.5°	93.9	84.9
90°	14.1	14.1
92.5°	56.1	45.0
95°	195.8	162.1
97.5°	469.1	404.9
100°	676.0	599.3
102.5°	879.4	813.7
105°	1138.7	1103.5
107.5°	1308.7	1317.2
110°	1373.4	1410.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1379.2	1435.6
115°	1342.6	1420.9
117.5°	1265.2	1351.9
120°	1202.6	1286.9
122.5°	1141.8	1225.0
125°	1054.9	1131.6
127.5°	976.9	1041.5
130°	930.9	990.6
132.5°	889.1	942.6
135°	831.9	878.0
137.5°	786.1	823.8
140°	754.5	789.8
142.5°	728.4	758.8
145°	689.4	712.3
147.5°	659.3	678.4
150°	640.4	655.8
152.5°	624.3	635.9
155°	605.7	613.4
157.5°	591.0	596.4
160°	582.2	585.4
162.5°	576.5	579.4
165°	568.2	571.3
167.5°	562.3	563.6
170°	560.6	560.6
172.5°	556.3	555.1
175°	553.6	553.6
177.5°	551.2	549.9
180°	549.9	549.9



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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	7.56	8.65	8.34	9.47	10.47	20.74	21.83	21.52	22.65	23.65
	3H	8.28	9.27	9.08	10.09	11.12	22.59	23.58	23.39	24.41	25.43
	4H	8.59	9.53	9.41	10.36	11.40	23.25	24.18	24.06	25.02	26.06
	6H	8.85	9.72	9.68	10.56	11.61	23.69	24.56	24.52	25.40	26.45
	8H	8.93	9.75	9.77	10.61	11.67	23.82	24.65	24.66	25.50	26.56
	12H	8.95	9.74	9.80	10.59	11.68	23.90	24.68	24.74	25.54	26.62
4H	2H	14.80	15.74	15.62	16.57	17.61	21.04	21.97	21.86	22.81	23.85
	3H	16.39	17.18	17.22	18.04	19.10	23.11	23.89	23.94	24.76	25.81
	4H	16.50	17.21	17.34	18.07	19.16	23.88	24.60	24.73	25.46	26.54
	6H	16.52	17.14	17.38	18.03	19.11	24.44	25.06	25.30	25.95	27.03
	8H	16.50	17.08	17.37	17.97	19.07	24.61	25.19	25.47	26.07	27.17
	12H	16.47	17.00	17.36	17.90	19.00	24.71	25.24	25.60	26.14	27.24
8H	4H	17.96	18.54	18.83	19.42	20.52	23.96	24.54	24.83	25.43	26.53
	6H	18.21	18.70	19.11	19.62	20.72	24.60	25.09	25.50	26.01	27.11
	8H	18.24	18.66	19.14	19.58	20.70	24.83	25.26	25.73	26.17	27.29
	12H	18.21	18.59	19.12	19.50	20.67	24.98	25.36	25.89	26.27	27.44
12H	4H	18.12	18.64	19.00	19.54	20.65	23.93	24.45	24.81	25.36	26.46
	6H	18.48	18.91	19.38	19.82	20.94	24.59	25.02	25.49	25.94	27.05
	8H	18.56	18.93	19.46	19.84	21.01	24.83	25.21	25.74	26.12	27.29