

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: P938150

Luminaire Tested: SQ4-FB-125U-125D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938150  
REPORT IS A COMBINATION OF REPORTS P933600 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-125D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

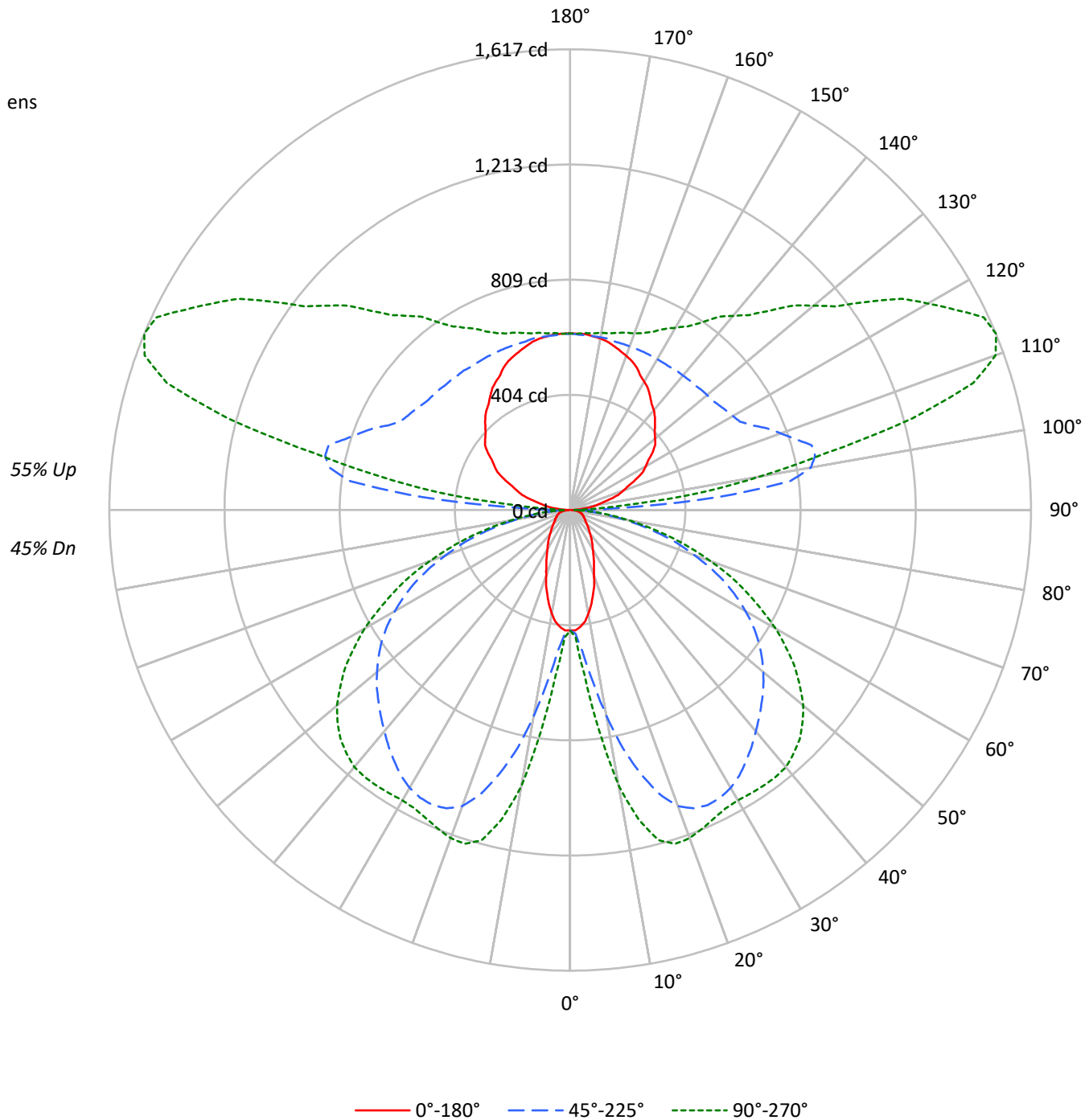
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7287.3 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: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 75.2  
Input Voltage (V): NR  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

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

	0°	45°	90°
0°	3920	3920	3920
5°	3826	4529	5271
10°	3466	6596	8738
15°	2943	8612	10551
20°	2394	9973	10753
25°	1995	10428	10535
30°	1679	10486	10515
35°	1482	10303	10786
40°	1290	10069	11067
45°	1166	9895	11111
50°	1067	9736	10927
55°	1018	9507	10443
60°	1041	9078	9679
65°	1075	8429	8626
70°	1137	7336	7289
75°	1249	5966	5688
80°	1334	4123	3833
85°	1126	2175	1963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11111 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.7	0.8
10°-20°	242.3	3.3
20°-30°	423.8	5.8
30°-40°	545.5	7.5
40°-50°	609.3	8.4
50°-60°	583.6	8.0
60°-70°	462.5	6.3
70°-80°	271.9	3.7
80°-90°	77.9	1.1
90°-100°	302.0	4.1
100°-110°	793.9	10.9
110°-120°	823.2	11.3
120°-130°	660.3	9.1
130°-140°	518.1	7.1
140°-150°	397.7	5.5
150°-160°	286.4	3.9
160°-170°	175.2	2.4
170°-180°	59.2	0.8
0°-30°	720.7	9.9
0°-40°	1266.2	17.4
0°-60°	2459.1	33.7
0°-90°	3271.4	44.9
90°-120°	1919.0	26.3
90°-150°	3495.1	48.0
90°-180°	4016.0	55.1
0°-180°	7287.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	412	442	497	562	583	38
15°	308	569	959	1163	1200	86
25°	197	645	1143	1193	1194	91
35°	133	617	1076	1137	1182	83
45°	91	492	951	1090	1139	70
55°	65	312	807	938	963	59
65°	52	166	599	674	683	51
75°	38	102	329	361	363	40
85°	14	31	82	90	91	14
90°	4	12	32	16	16	4
95°	40	156	520	268	182	44
105°	143	217	878	1332	1243	152
115°	254	308	703	1402	1601	251
125°	353	396	639	1080	1275	314
135°	421	464	620	872	989	326
145°	488	520	612	744	802	306
155°	552	568	612	672	691	254
165°	596	604	612	636	644	168
175°	620	620	616	624	624	59
180°	620	620	620	620	620	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5
2.5°	422.5	422.5	425.3	426.6	429.4	430.7	433.5	436.2	444.3	445.7	448.4
5°	411.7	417.2	434.8	441.6	460.6	486.5	497.3	515.0	551.7	562.5	569.3
7.5°	395.4	407.6	451.1	462.0	509.5	577.4	606.0	644.1	702.5	731.0	754.1
10°	369.5	395.4	472.8	498.7	576.1	679.3	732.3	785.3	873.7	913.1	928.0
12.5°	341.0	383.2	495.9	531.3	642.7	793.5	857.4	915.8	1016.4	1069.4	1077.5
15°	308.4	365.5	517.7	569.3	713.3	888.6	959.3	1031.3	1125.1	1163.1	1172.6
17.5°	279.9	352.0	538.1	592.5	767.7	974.2	1046.2	1106.1	1182.1	1208.0	1214.7
20°	244.6	330.2	551.7	622.3	824.8	1036.8	1106.1	1152.2	1203.9	1220.2	1222.9
22.5°	218.7	307.1	559.8	633.2	862.8	1074.7	1133.2	1169.9	1205.2	1210.7	1212.0
25°	197.1	281.3	558.5	645.4	895.4	1097.9	1142.7	1169.9	1190.3	1193.0	1193.0
27.5°	176.7	252.7	553.0	648.1	919.8	1103.3	1138.7	1157.7	1167.2	1172.6	1172.6
30°	159.0	225.6	539.5	642.7	930.8	1097.9	1126.4	1135.9	1145.4	1153.6	1157.7
32.5°	145.4	199.7	519.1	631.8	932.1	1084.3	1104.7	1110.1	1123.7	1142.7	1149.5
35°	133.1	173.9	495.9	616.9	923.9	1062.5	1076.1	1081.6	1108.7	1137.3	1146.8
37.5°	120.9	154.9	466.1	591.1	911.7	1036.8	1046.2	1055.8	1097.9	1131.8	1142.7
40°	108.7	138.6	430.7	562.5	892.7	1005.4	1013.6	1028.6	1084.3	1123.7	1134.6
42.5°	99.2	125.0	392.7	532.6	868.2	970.2	982.4	1004.2	1068.0	1110.1	1122.4
45°	91.1	111.5	352.0	491.8	837.0	933.5	951.2	981.0	1049.0	1089.8	1100.6
47.5°	82.9	101.9	309.8	449.8	803.0	896.8	919.8	953.9	1023.1	1062.5	1072.1
50°	76.1	92.4	267.6	404.9	766.3	857.4	884.6	919.8	990.5	1027.2	1039.5
52.5°	70.7	84.2	228.3	360.1	724.2	816.6	847.9	884.6	951.2	986.5	994.6
55°	65.2	77.4	194.3	312.5	680.7	773.1	807.1	842.4	907.6	937.5	943.0
57.5°	62.5	72.0	165.7	267.6	634.5	724.2	762.3	794.9	856.0	879.1	884.6
60°	58.5	67.9	144.1	229.7	584.3	678.1	710.7	743.3	794.9	813.9	817.9
62.5°	54.4	65.2	127.8	193.0	532.6	623.7	656.3	686.2	729.7	743.3	748.6
65°	51.6	62.5	115.5	165.7	479.6	566.6	599.2	625.1	660.4	674.0	676.7
67.5°	48.9	59.8	106.0	142.7	426.6	509.5	534.0	558.5	585.6	599.2	600.6
70°	44.8	57.1	97.8	126.4	372.3	444.3	464.7	490.5	512.2	519.1	523.2
72.5°	42.2	53.0	92.4	114.1	316.6	381.8	400.9	415.8	434.8	441.6	441.6
75°	38.1	47.5	87.0	101.9	259.5	312.5	328.8	343.8	358.7	361.4	357.3
77.5°	34.0	42.2	74.8	85.6	202.4	247.3	260.9	269.0	281.3	283.9	285.3
80°	28.5	36.7	58.5	66.6	146.7	182.0	191.6	198.3	209.3	209.3	212.0
82.5°	21.8	28.5	42.2	47.5	99.2	125.0	133.1	137.2	144.1	144.1	144.1
85°	13.6	17.7	27.1	31.2	59.8	76.1	81.5	82.9	88.3	89.7	89.7
87.5°	6.8	9.5	17.7	19.0	31.2	39.4	39.4	42.2	42.2	40.8	39.4
90°	4.2	7.5	10.8	11.6	18.3	27.1	31.6	28.0	21.0	15.8	15.8
92.5°	16.6	44.9	73.2	80.2	112.8	156.3	177.9	155.9	112.0	79.0	75.9
95°	39.9	91.6	143.4	156.3	277.6	439.2	520.1	464.1	352.2	268.2	258.6
97.5°	69.0	114.6	160.3	171.7	373.9	643.4	778.3	742.9	672.1	619.0	601.0
100°	91.5	132.9	174.3	184.6	409.0	708.1	857.7	860.3	865.5	869.3	847.7
102.5°	110.6	149.2	187.8	197.5	425.0	728.5	880.2	925.3	1015.5	1083.1	1064.6
105°	143.0	175.8	208.5	216.6	437.0	730.8	877.7	978.8	1180.9	1332.5	1322.5
107.5°	176.3	206.8	237.3	244.9	439.2	698.3	827.8	968.8	1250.8	1462.2	1464.6
110°	198.7	226.3	253.7	260.7	435.9	669.5	786.2	943.8	1259.1	1495.5	1505.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	220.7	247.0	273.2	279.8	435.9	644.2	748.4	909.7	1232.4	1474.3	1490.2
115°	254.0	278.2	302.5	308.5	440.0	615.3	703.0	858.4	1169.2	1402.4	1424.4
117.5°	286.9	308.9	330.9	336.4	448.2	597.4	671.9	812.1	1092.6	1302.9	1327.4
120°	306.0	326.7	347.5	352.6	454.9	591.2	659.4	787.6	1043.8	1236.1	1259.8
122.5°	324.7	345.6	366.5	371.7	464.5	588.0	649.9	765.3	996.0	1169.1	1192.5
125°	353.4	372.4	391.5	396.2	477.3	585.4	639.4	737.5	933.5	1080.5	1102.1
127.5°	376.7	395.9	415.1	419.9	490.2	583.9	630.7	714.8	883.2	1009.5	1027.7
130°	389.1	409.9	430.6	435.7	499.6	584.8	627.4	702.3	852.1	964.6	981.3
132.5°	402.1	422.8	443.5	448.6	507.3	585.4	624.5	691.5	825.7	926.3	941.4
135°	421.2	440.0	458.8	463.6	515.5	584.8	619.5	675.7	788.1	872.3	885.3
137.5°	440.7	459.3	478.0	482.7	528.0	588.4	618.6	666.1	761.1	832.3	842.9
140°	456.9	474.1	491.3	495.6	535.7	589.1	615.7	656.8	738.8	800.4	810.3
142.5°	469.4	485.3	501.2	505.2	542.0	591.2	615.7	651.8	723.8	777.9	786.4
145°	488.5	502.4	516.2	519.7	550.3	591.2	611.6	641.0	700.0	744.2	750.7
147.5°	507.7	521.1	534.6	538.0	562.5	595.2	611.6	634.8	681.2	716.0	721.3
150°	520.1	532.3	544.5	547.6	568.9	597.4	611.6	631.2	670.3	699.7	704.1
152.5°	533.0	542.3	551.5	553.8	573.1	598.7	611.6	628.3	661.8	686.8	690.1
155°	552.1	559.0	565.8	567.5	582.2	601.8	611.6	624.9	651.5	671.5	673.6
157.5°	566.3	572.9	579.5	581.2	591.3	604.8	611.6	621.9	642.6	658.1	659.7
160°	575.8	581.0	586.2	587.5	595.5	606.2	611.6	620.4	638.1	651.5	652.4
162.5°	585.4	589.2	593.2	594.1	599.9	607.7	611.6	619.0	634.0	645.3	646.1
165°	595.7	599.3	602.8	603.7	606.3	609.8	611.6	616.9	627.6	635.7	636.5
167.5°	605.4	607.0	608.7	609.1	611.3	614.3	615.7	619.3	626.3	631.6	632.0
170°	611.6	613.3	614.9	615.3	615.5	615.7	615.7	619.3	626.3	631.6	631.6
172.5°	614.9	615.3	615.7	615.7	615.7	615.7	615.7	618.5	624.0	628.2	627.9
175°	619.5	619.5	619.5	619.5	618.2	616.5	615.7	617.5	621.0	623.6	623.6
177.5°	619.5	619.5	619.5	619.5	618.6	617.2	616.5	617.9	620.7	622.8	622.4
180°	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	422.5	422.5
2.5°	451.1	448.4
5°	580.2	582.9
7.5°	781.3	780.0
10°	971.5	983.8
12.5°	1110.1	1112.8
15°	1194.4	1199.8
17.5°	1227.0	1228.3
20°	1228.3	1225.6
22.5°	1213.3	1210.7
25°	1195.7	1194.4
27.5°	1179.4	1180.7
30°	1172.6	1176.7
32.5°	1172.6	1179.4
35°	1175.4	1182.1
37.5°	1174.0	1182.1
40°	1168.5	1178.0
42.5°	1153.6	1160.3
45°	1130.5	1138.7
47.5°	1100.6	1106.1
50°	1062.5	1068.0
52.5°	1015.0	1016.4
55°	957.9	963.4
57.5°	896.8	898.2
60°	828.9	833.0
62.5°	756.8	756.8
65°	680.7	683.4
67.5°	601.9	608.8
70°	521.8	523.2
72.5°	442.9	442.9
75°	361.4	362.8
77.5°	283.9	283.9
80°	210.6	212.0
82.5°	145.4	148.1
85°	91.1	91.1
87.5°	42.2	38.1
90°	15.8	15.8
92.5°	63.3	50.7
95°	220.6	182.5
97.5°	528.5	456.1
100°	761.5	675.2
102.5°	990.7	916.8
105°	1282.9	1243.1
107.5°	1474.2	1483.9
110°	1547.2	1588.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1553.7	1617.3
115°	1512.5	1600.7
117.5°	1425.2	1522.9
120°	1354.7	1449.7
122.5°	1286.2	1379.9
125°	1188.4	1274.7
127.5°	1100.4	1173.3
130°	1048.6	1115.9
132.5°	1001.6	1061.8
135°	937.2	989.1
137.5°	885.5	927.9
140°	850.0	889.7
142.5°	820.6	854.8
145°	776.6	802.4
147.5°	742.7	764.1
150°	721.5	738.8
152.5°	703.2	716.4
155°	682.3	691.0
157.5°	665.8	671.9
160°	655.9	659.4
162.5°	649.5	652.8
165°	640.1	643.6
167.5°	633.4	634.9
170°	631.6	631.6
172.5°	626.6	625.3
175°	623.6	623.6
177.5°	621.0	619.5
180°	619.5	619.5



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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	5.25	6.10	6.24	7.11	8.45	18.39	19.24	19.38	20.25	21.59
	3H	5.96	6.72	6.96	7.74	9.10	20.22	20.98	21.22	22.00	23.36
	4H	6.26	6.98	7.27	8.00	9.37	20.85	21.57	21.87	22.60	23.96
	6H	6.51	7.17	7.53	8.20	9.58	21.27	21.94	22.29	22.96	24.34
	8H	6.57	7.21	7.61	8.25	9.63	21.38	22.02	22.41	23.06	24.44
	12H	6.59	7.20	7.63	8.23	9.64	21.44	22.05	22.48	23.08	24.49
4H	2H	12.44	13.17	13.46	14.19	15.56	18.67	19.39	19.69	20.41	21.78
	3H	14.01	14.62	15.04	15.67	17.05	20.70	21.30	21.73	22.35	23.73
	4H	14.11	14.66	15.14	15.70	17.11	21.45	22.01	22.49	23.05	24.45
	6H	14.12	14.60	15.17	15.66	17.06	21.98	22.46	23.03	23.52	24.92
	8H	14.09	14.54	15.14	15.60	17.01	22.13	22.58	23.18	23.64	25.05
	12H	14.05	14.46	15.12	15.53	16.95	22.22	22.62	23.29	23.70	25.12
8H	4H	15.54	15.99	16.59	17.04	18.46	21.51	21.96	22.56	23.02	24.43
	6H	15.78	16.15	16.86	17.25	18.66	22.13	22.50	23.20	23.60	25.01
	8H	15.80	16.13	16.88	17.21	18.64	22.34	22.67	23.42	23.75	25.18
	12H	15.77	16.06	16.85	17.13	18.60	22.48	22.76	23.56	23.84	25.31
12H	4H	15.68	16.08	16.75	17.16	18.58	21.46	21.87	22.53	22.94	24.36
	6H	16.04	16.36	17.12	17.45	18.88	22.11	22.44	23.19	23.52	24.95
	8H	16.11	16.39	17.19	17.47	18.94	22.33	22.62	23.42	23.70	25.17