

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: P937162

Luminaire Tested: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

**Test Information**

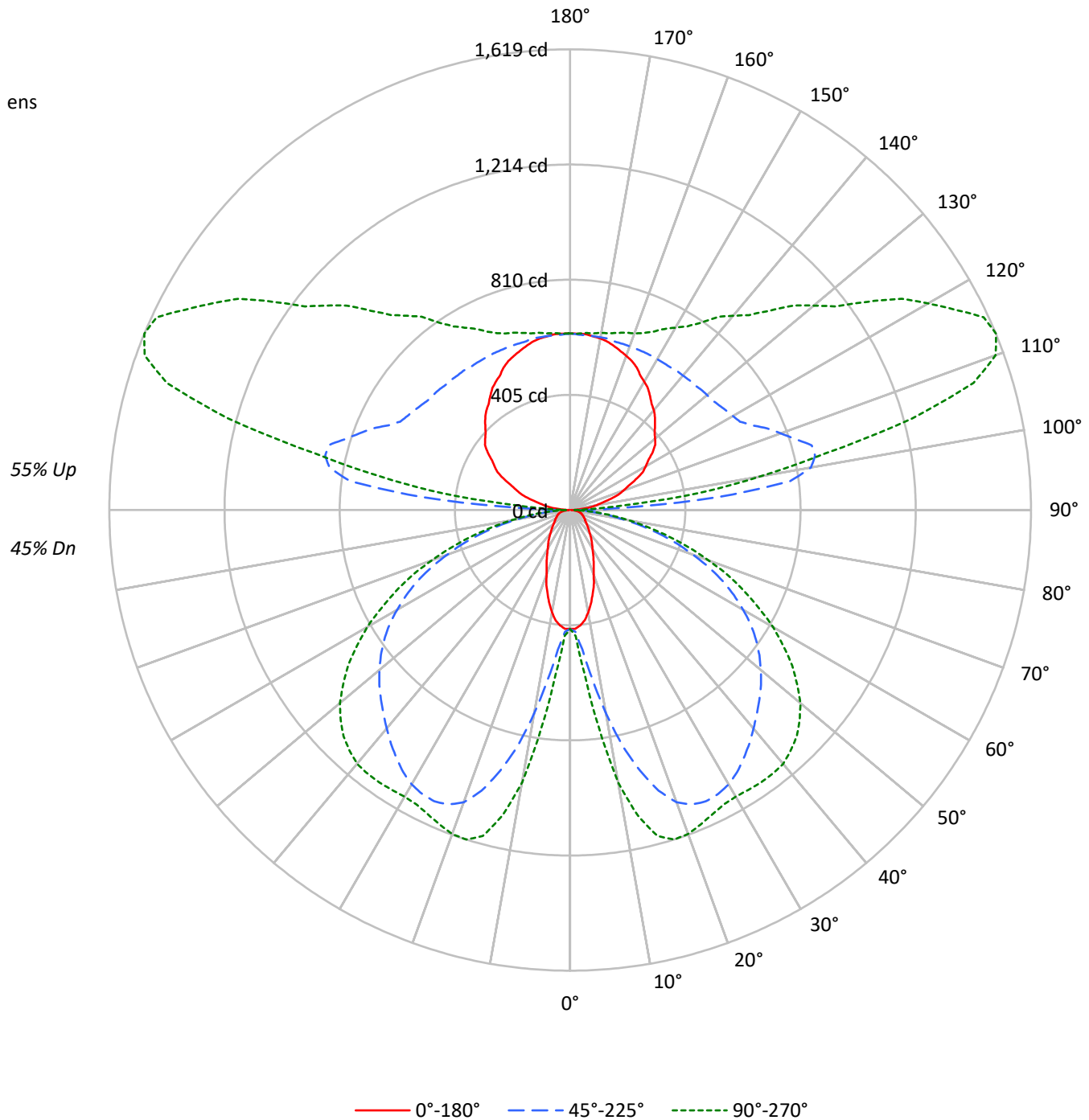
Test Method: LM-79-2019  
Report Number: P937162  
REPORT IS A COMBINATION OF REPORTS P933510 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-6-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7254.7 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 63.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37				
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30				
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25				
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21				
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17				
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15				
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13				
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11				
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10				
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9				

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

	0°	45°	90°
0°	2584	2584	2584
5°	2523	2985	3473
10°	2288	4351	5758
15°	1944	5683	6953
20°	1582	6585	7086
25°	1319	6889	6942
30°	1111	6930	6929
35°	982	6813	7108
40°	855	6662	7293
45°	774	6550	7322
50°	710	6450	7201
55°	679	6303	6881
60°	694	6023	6376
65°	721	5599	5684
70°	766	4880	4802
75°	846	3975	3748
80°	918	2754	2525
85°	799	1459	1293

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7322 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.0	0.7
10°-20°	239.5	3.3
20°-30°	418.9	5.8
30°-40°	539.2	7.4
40°-50°	602.2	8.3
50°-60°	576.8	8.0
60°-70°	457.1	6.3
70°-80°	268.8	3.7
80°-90°	77.0	1.1
90°-100°	302.4	4.2
100°-110°	794.9	11.0
110°-120°	824.3	11.4
120°-130°	661.2	9.1
130°-140°	518.8	7.2
140°-150°	398.2	5.5
150°-160°	286.8	4.0
160°-170°	175.5	2.4
170°-180°	59.3	0.8
0°-30°	712.3	9.8
0°-40°	1251.5	17.3
0°-60°	2430.6	33.5
0°-90°	3233.5	44.6
90°-120°	1921.6	26.5
90°-150°	3499.7	48.2
90°-180°	4021.0	55.4
0°-180°	7254.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	407	436	492	556	576	38
15°	305	563	948	1150	1186	85
25°	195	638	1130	1179	1181	90
35°	132	610	1064	1124	1168	82
45°	90	486	940	1077	1126	70
55°	64	309	798	927	952	59
65°	51	164	592	666	676	51
75°	38	101	325	357	359	39
85°	13	31	81	89	90	14
90°	4	12	32	16	16	4
95°	40	156	521	268	183	44
105°	143	217	879	1334	1245	152
115°	254	309	704	1404	1603	251
125°	354	397	640	1082	1276	314
135°	422	464	620	873	990	326
145°	489	520	612	745	804	306
155°	553	568	612	672	692	254
165°	596	604	612	637	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°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	417.7	417.7	420.3	421.7	424.4	425.7	428.4	431.1	439.2	440.5	443.2
5°	406.9	412.3	429.7	436.5	455.3	480.8	491.5	509.0	545.2	556.0	562.7
7.5°	390.8	402.9	445.9	456.6	503.6	570.8	599.0	636.6	694.3	722.5	745.3
10°	365.3	390.8	467.4	492.9	569.4	671.5	723.9	776.2	863.5	902.5	917.2
12.5°	337.1	378.7	490.2	525.1	635.2	784.3	847.4	905.2	1004.5	1057.0	1065.1
15°	304.9	361.3	511.7	562.7	705.1	878.3	948.1	1019.4	1112.1	1149.7	1159.1
17.5°	276.7	347.8	531.8	585.5	758.8	962.9	1034.2	1093.3	1168.5	1194.0	1200.7
20°	241.7	326.3	545.2	615.1	815.2	1024.8	1093.3	1138.9	1190.0	1206.1	1208.8
22.5°	216.2	303.5	553.3	625.8	852.8	1062.4	1120.1	1156.4	1191.3	1196.7	1198.0
25°	194.7	278.0	552.0	637.9	885.0	1085.2	1129.5	1156.4	1176.5	1179.2	1179.2
27.5°	174.6	249.8	546.6	640.6	909.2	1090.6	1125.5	1144.3	1153.7	1159.1	1159.1
30°	157.1	222.9	533.2	635.2	919.9	1085.2	1113.4	1122.8	1132.2	1140.3	1144.3
32.5°	143.7	197.4	513.0	624.5	921.3	1071.8	1091.9	1097.3	1110.7	1129.5	1136.2
35°	131.6	171.9	490.2	609.7	913.2	1050.3	1063.7	1069.1	1096.0	1124.2	1133.6
37.5°	119.5	153.1	460.6	584.2	901.1	1024.8	1034.2	1043.6	1085.2	1118.8	1129.5
40°	107.4	137.0	425.7	556.0	882.3	993.8	1001.9	1016.6	1071.8	1110.7	1121.5
42.5°	98.0	123.6	388.1	526.4	858.2	958.9	971.0	992.5	1055.7	1097.3	1109.4
45°	90.0	110.1	347.8	486.2	827.3	922.6	940.1	969.6	1036.9	1077.1	1087.9
47.5°	81.9	100.7	306.2	444.5	793.7	886.4	909.2	942.8	1011.3	1050.3	1059.7
50°	75.2	91.3	264.6	400.2	757.4	847.4	874.3	909.2	979.0	1015.3	1027.5
52.5°	69.8	83.3	225.6	355.9	715.8	807.1	838.0	874.3	940.1	975.0	983.1
55°	64.5	76.5	192.0	308.9	672.8	764.1	797.7	832.6	897.1	926.6	932.0
57.5°	61.8	71.2	163.8	264.6	627.2	715.8	753.4	785.6	846.1	868.9	874.3
60°	57.7	67.1	142.4	227.0	577.5	670.1	702.4	734.6	785.6	804.4	808.5
62.5°	53.7	64.5	126.2	190.7	526.4	616.4	648.7	678.2	721.2	734.6	740.0
65°	51.0	61.8	114.2	163.8	474.1	560.0	592.2	617.8	652.7	666.1	668.8
67.5°	48.3	59.1	104.8	141.0	421.7	503.6	527.8	552.0	578.8	592.2	593.6
70°	44.3	56.4	96.7	124.9	368.0	439.2	459.3	484.8	506.3	513.0	517.0
72.5°	41.6	52.4	91.3	112.8	312.9	377.4	396.2	410.9	429.7	436.5	436.5
75°	37.6	47.0	85.9	100.7	256.5	308.9	325.0	339.8	354.5	357.2	353.2
77.5°	33.6	41.6	73.9	84.6	200.1	244.4	257.8	265.9	278.0	280.7	282.0
80°	28.2	36.3	57.7	65.8	145.0	180.0	189.4	196.1	206.8	206.8	209.5
82.5°	21.5	28.2	41.6	47.0	98.0	123.6	131.6	135.6	142.4	142.4	142.4
85°	13.4	17.5	26.9	30.9	59.1	75.2	80.6	81.9	87.3	88.6	88.6
87.5°	6.7	9.4	17.5	18.8	30.9	38.9	38.9	41.6	41.6	40.3	38.9
90°	4.1	7.4	10.8	11.6	18.3	27.1	31.6	28.1	21.1	15.8	15.8
92.5°	16.7	44.9	73.2	80.3	112.9	156.4	178.2	156.1	112.1	79.1	75.9
95°	39.9	91.8	143.5	156.5	277.9	439.9	520.8	464.8	352.6	268.5	259.0
97.5°	69.1	114.8	160.4	171.9	374.4	644.4	779.4	743.9	673.1	619.9	601.7
100°	91.6	133.0	174.5	184.9	409.5	709.1	858.9	861.5	866.7	870.5	848.9
102.5°	110.8	149.4	188.1	197.8	425.6	729.4	881.3	926.5	1016.8	1084.5	1066.0
105°	143.2	176.0	208.8	216.9	437.5	731.7	878.8	980.0	1182.4	1334.3	1324.3
107.5°	176.6	207.1	237.6	245.2	439.8	699.1	828.9	970.1	1252.5	1464.2	1466.6
110°	199.0	226.6	254.1	261.0	436.4	670.3	787.2	945.1	1260.8	1497.5	1507.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	221.1	247.3	273.6	280.1	436.6	645.1	749.4	910.9	1233.9	1476.2	1492.1
115°	254.4	278.6	302.8	308.9	440.6	616.2	704.0	859.6	1170.8	1404.2	1426.2
117.5°	287.2	309.2	331.3	336.8	448.8	598.1	672.7	813.2	1094.1	1304.7	1329.2
120°	306.4	327.1	347.8	353.0	455.4	592.0	660.3	788.6	1045.2	1237.7	1261.5
122.5°	325.2	346.0	367.0	372.2	465.0	588.8	650.7	766.2	997.3	1170.6	1194.1
125°	353.8	372.9	392.0	396.7	477.9	586.2	640.3	738.5	934.8	1082.0	1103.6
127.5°	377.2	396.4	415.6	420.4	490.8	584.6	631.6	715.8	884.4	1010.8	1029.1
130°	389.6	410.4	431.1	436.3	500.3	585.6	628.2	703.3	853.3	965.9	982.7
132.5°	402.5	423.3	444.0	449.2	507.9	586.2	625.3	692.4	826.8	927.5	942.6
135°	421.7	440.6	459.5	464.2	516.2	585.6	620.3	676.5	789.0	873.4	886.4
137.5°	441.3	459.9	478.6	483.3	528.7	589.2	619.5	667.0	762.1	833.4	844.1
140°	457.5	474.7	492.0	496.3	536.4	589.8	616.5	657.6	739.8	801.4	811.3
142.5°	470.0	486.0	501.9	505.9	542.7	591.9	616.5	652.6	724.8	778.9	787.5
145°	489.2	503.1	516.9	520.4	551.1	592.0	612.4	641.9	700.9	745.2	751.6
147.5°	508.3	521.8	535.3	538.7	563.2	596.0	612.4	635.6	682.0	716.9	722.2
150°	520.8	533.0	545.2	548.3	569.7	598.2	612.4	632.0	671.2	700.7	705.1
152.5°	533.7	543.0	552.2	554.6	573.8	599.5	612.4	629.1	662.6	687.8	691.1
155°	552.9	559.7	566.6	568.3	582.9	602.5	612.4	625.7	652.4	672.4	674.5
157.5°	567.0	573.7	580.3	582.0	592.2	605.7	612.4	622.8	643.5	659.0	660.6
160°	576.6	581.8	587.0	588.2	596.3	607.0	612.4	621.3	639.0	652.3	653.2
162.5°	586.2	590.1	593.9	594.9	600.8	608.5	612.4	619.9	634.9	646.1	647.0
165°	596.5	600.1	603.6	604.5	607.1	610.6	612.4	617.8	628.5	636.6	637.5
167.5°	606.1	607.8	609.4	609.9	612.1	615.1	616.5	620.0	627.1	632.4	632.7
170°	612.4	614.1	615.7	616.2	616.2	616.4	616.5	620.0	627.1	632.4	632.4
172.5°	615.7	616.1	616.4	616.5	616.5	616.5	616.5	619.3	624.8	629.0	628.7
175°	620.3	620.3	620.3	620.3	619.0	617.3	616.5	618.3	621.8	624.5	624.5
177.5°	620.3	620.3	620.3	620.3	619.3	618.0	617.4	618.8	621.6	623.7	623.3
180°	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	417.7	417.7
2.5°	445.9	443.2
5°	573.4	576.1
7.5°	772.2	770.9
10°	960.2	972.3
12.5°	1097.3	1100.0
15°	1180.6	1185.9
17.5°	1212.8	1214.1
20°	1214.1	1211.4
22.5°	1199.4	1196.7
25°	1181.9	1180.6
27.5°	1165.8	1167.1
30°	1159.1	1163.1
32.5°	1159.1	1165.8
35°	1161.8	1168.5
37.5°	1160.4	1168.5
40°	1155.0	1164.4
42.5°	1140.3	1147.0
45°	1117.4	1125.5
47.5°	1087.9	1093.3
50°	1050.3	1055.7
52.5°	1003.2	1004.5
55°	946.8	952.2
57.5°	886.4	887.7
60°	819.2	823.2
62.5°	748.0	748.0
65°	672.8	675.5
67.5°	594.9	601.6
70°	515.7	517.0
72.5°	437.8	437.8
75°	357.2	358.6
77.5°	280.7	280.7
80°	208.2	209.5
82.5°	143.7	146.4
85°	90.0	90.0
87.5°	41.6	37.6
90°	15.8	15.8
92.5°	63.3	50.8
95°	220.9	182.7
97.5°	529.2	456.7
100°	762.4	676.1
102.5°	992.0	918.0
105°	1284.5	1244.8
107.5°	1476.2	1485.8
110°	1549.2	1590.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1555.8	1619.4
115°	1514.5	1602.8
117.5°	1427.0	1524.9
120°	1356.6	1451.7
122.5°	1287.9	1381.7
125°	1190.0	1276.4
127.5°	1102.0	1174.8
130°	1050.0	1117.3
132.5°	1002.9	1063.3
135°	938.4	990.4
137.5°	886.6	929.2
140°	851.2	890.9
142.5°	821.7	855.9
145°	777.6	803.5
147.5°	743.6	765.1
150°	722.4	739.8
152.5°	704.2	717.3
155°	683.2	691.9
157.5°	666.6	672.7
160°	656.7	660.3
162.5°	650.3	653.6
165°	641.0	644.4
167.5°	634.2	635.7
170°	632.4	632.4
172.5°	627.4	626.1
175°	624.5	624.5
177.5°	621.8	620.3
180°	620.3	620.3



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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	3.78	4.63	4.78	5.64	6.98	16.95	17.79	17.94	18.81	20.15
	3H	4.49	5.25	5.49	6.27	7.63	18.78	19.54	19.79	20.56	21.93
	4H	4.78	5.51	5.80	6.53	7.90	19.42	20.14	20.44	21.17	22.54
	6H	5.03	5.70	6.06	6.73	8.11	19.85	20.51	20.88	21.54	22.93
	8H	5.10	5.74	6.14	6.78	8.16	19.96	20.60	21.00	21.64	23.02
	12H	5.12	5.72	6.16	6.76	8.17	20.03	20.63	21.07	21.67	23.08
4H	2H	10.99	11.71	12.01	12.73	14.10	17.22	17.94	18.24	18.97	20.34
	3H	12.55	13.16	13.59	14.21	15.60	19.26	19.86	20.29	20.92	22.30
	4H	12.65	13.20	13.69	14.25	15.65	20.02	20.58	21.06	21.62	23.03
	6H	12.66	13.14	13.71	14.20	15.61	20.56	21.03	21.61	22.10	23.50
	8H	12.63	13.08	13.69	14.14	15.56	20.72	21.16	21.77	22.22	23.64
	12H	12.59	12.99	13.66	14.07	15.49	20.81	21.21	21.88	22.28	23.71
8H	4H	14.09	14.53	15.14	15.59	17.01	20.08	20.53	21.13	21.59	23.01
	6H	14.33	14.70	15.41	15.80	17.22	20.71	21.08	21.78	22.18	23.59
	8H	14.35	14.67	15.43	15.76	17.19	20.92	21.25	22.01	22.33	23.77
	12H	14.32	14.60	15.40	15.68	17.16	21.06	21.35	22.15	22.43	23.91
12H	4H	14.23	14.63	15.30	15.71	17.13	20.03	20.44	21.10	21.51	22.94
	6H	14.59	14.91	15.67	16.00	17.43	20.69	21.01	21.77	22.10	23.53
	8H	14.66	14.94	15.74	16.02	17.50	20.92	21.20	22.00	22.28	23.76