

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: P936693

Luminaire Tested: SQ4-FB-050U-050D-B2750-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936693
REPORT IS A COMBINATION OF REPORTS P933485 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B2750-1D-UNV-STD-W-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

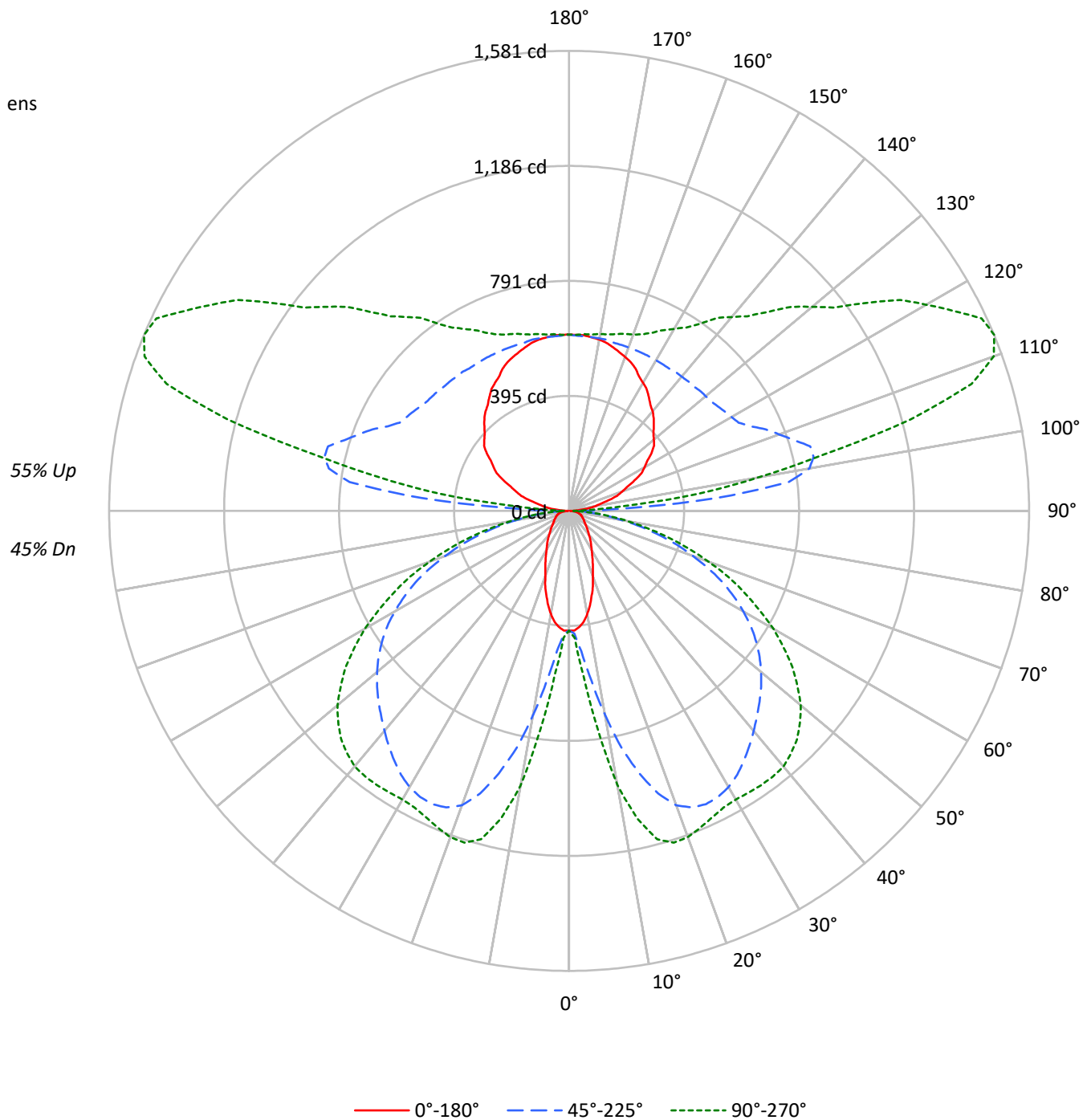
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7110.1 lumens
Efficiency: N/A
Efficacy: 125.2 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: General Diffuse

Input Watts (W): 56.8
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	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	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	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	66	56	49	43	47	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	18
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	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1908	1908	1908
5°	1864	2205	2565
10°	1691	3215	4252
15°	1437	4200	5135
20°	1170	4867	5233
25°	976	5094	5127
30°	823	5126	5117
35°	728	5041	5249
40°	634	4930	5386
45°	574	4849	5407
50°	526	4776	5318
55°	505	4669	5082
60°	517	4465	4710
65°	538	4152	4199
70°	573	3622	3547
75°	635	2953	2768
80°	694	2048	1865
85°	615	1087	954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5407 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	0.7
10°-20°	235.8	3.3
20°-30°	412.5	5.8
30°-40°	530.9	7.5
40°-50°	593.1	8.3
50°-60°	568.0	8.0
60°-70°	450.2	6.3
70°-80°	264.7	3.7
80°-90°	75.9	1.1
90°-100°	295.2	4.2
100°-110°	776.1	10.9
110°-120°	804.7	11.3
120°-130°	645.5	9.1
130°-140°	506.5	7.1
140°-150°	388.8	5.5
150°-160°	280.0	3.9
160°-170°	171.3	2.4
170°-180°	57.9	0.8
0°-30°	701.5	9.9
0°-40°	1232.4	17.3
0°-60°	2393.5	33.7
0°-90°	3184.2	44.8
90°-120°	1876.0	26.4
90°-150°	3416.8	48.1
90°-180°	3926.0	55.2
0°-180°	7110.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	411	411	411	411	411	
5°	401	430	484	548	567	37
15°	300	554	934	1132	1168	84
25°	192	628	1112	1161	1162	88
35°	130	600	1047	1107	1151	81
45°	89	479	926	1061	1108	69
55°	64	304	786	912	938	58
65°	50	161	583	656	665	50
75°	37	99	320	352	353	39
85°	13	30	79	87	89	14
90°	4	11	31	16	16	4
95°	39	153	508	262	178	43
105°	140	212	858	1303	1215	148
115°	248	302	687	1371	1565	245
125°	346	387	625	1056	1246	307
135°	412	453	606	853	967	319
145°	478	508	598	728	784	299
155°	540	555	598	656	676	248
165°	582	590	598	622	629	164
175°	606	606	602	610	610	57
180°	606	606	606	606	606	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3	411.3
2.5°	411.3	411.3	413.9	415.3	417.9	419.2	421.9	424.6	432.5	433.7	436.4
5°	400.7	406.0	423.2	429.8	448.3	473.5	484.0	501.2	537.0	547.5	554.1
7.5°	384.8	396.8	439.1	449.6	496.0	562.0	589.8	626.9	683.7	711.5	734.0
10°	359.7	384.8	460.3	485.4	560.7	661.2	712.9	764.4	850.3	888.7	903.3
12.5°	332.0	372.9	482.7	517.1	625.5	772.3	834.6	891.3	989.3	1040.8	1048.7
15°	300.2	355.7	503.8	554.1	694.3	864.9	933.7	1003.7	1095.1	1132.0	1141.3
17.5°	272.4	342.5	523.8	576.6	747.2	948.2	1018.3	1076.5	1150.6	1175.7	1182.3
20°	238.0	321.3	537.0	605.7	802.8	1009.1	1076.5	1121.5	1171.8	1187.6	1190.3
22.5°	212.9	298.9	544.9	616.2	839.8	1046.1	1102.9	1138.7	1173.0	1178.4	1179.7
25°	191.8	273.7	543.6	628.2	871.5	1068.6	1112.2	1138.7	1158.6	1161.2	1161.2
27.5°	172.0	246.0	538.3	630.8	895.4	1073.9	1108.3	1126.8	1136.1	1141.3	1141.3
30°	154.7	219.6	525.0	625.5	905.9	1068.6	1096.3	1105.6	1114.9	1122.9	1126.8
32.5°	141.5	194.4	505.2	615.0	907.2	1055.3	1075.2	1080.5	1093.7	1112.2	1118.8
35°	129.6	169.3	482.7	600.4	899.3	1034.2	1047.4	1052.8	1079.2	1107.0	1116.2
37.5°	117.7	150.8	453.7	575.3	887.4	1009.1	1018.3	1027.6	1068.6	1101.7	1112.2
40°	105.8	134.9	419.2	547.5	868.9	978.7	986.6	1001.2	1055.3	1093.7	1104.3
42.5°	96.5	121.7	382.2	518.4	845.1	944.3	956.2	977.3	1039.5	1080.5	1092.4
45°	88.6	108.5	342.5	478.7	814.6	908.6	925.8	954.8	1021.0	1060.6	1071.2
47.5°	80.7	99.2	301.5	437.8	781.6	872.9	895.4	928.4	995.9	1034.2	1043.5
50°	74.0	89.9	260.5	394.1	745.9	834.6	861.0	895.4	964.1	999.8	1011.7
52.5°	68.7	82.0	222.1	350.4	704.9	794.8	825.3	861.0	925.8	960.2	968.1
55°	63.5	75.4	189.1	304.2	662.6	752.5	785.5	820.0	883.5	912.5	917.9
57.5°	60.8	70.1	161.3	260.5	617.6	704.9	742.0	773.7	833.2	855.7	861.0
60°	56.9	66.2	140.2	223.5	568.7	659.9	691.7	723.4	773.7	792.2	796.2
62.5°	52.9	63.5	124.3	187.8	518.4	607.1	638.7	667.9	710.2	723.4	728.8
65°	50.3	60.8	112.4	161.3	466.9	551.5	583.2	608.4	642.8	656.0	658.6
67.5°	47.6	58.2	103.1	138.8	415.3	496.0	519.7	543.6	570.0	583.2	584.5
70°	43.7	55.5	95.2	123.0	362.4	432.5	452.3	477.4	498.6	505.2	509.2
72.5°	41.0	51.6	89.9	111.1	308.1	371.6	390.2	404.7	423.2	429.8	429.8
75°	37.1	46.2	84.6	99.2	252.6	304.2	320.1	334.5	349.1	351.8	347.9
77.5°	33.0	41.0	72.8	83.3	197.1	240.7	253.9	261.9	273.7	276.4	277.8
80°	27.8	35.7	56.9	64.8	142.9	177.2	186.5	193.1	203.7	203.7	206.3
82.5°	21.2	27.8	41.0	46.2	96.5	121.7	129.6	133.6	140.2	140.2	140.2
85°	13.2	17.2	26.4	30.4	58.2	74.0	79.4	80.7	86.0	87.3	87.3
87.5°	6.6	9.3	17.2	18.5	30.4	38.4	38.4	41.0	41.0	39.6	38.4
90°	4.0	7.3	10.6	11.3	17.8	26.5	30.9	27.4	20.6	15.5	15.5
92.5°	16.3	43.9	71.6	78.5	110.3	152.7	173.9	152.4	109.4	77.2	74.1
95°	39.0	89.6	140.2	152.8	271.3	429.4	508.5	453.8	344.3	262.2	252.9
97.5°	67.4	112.0	156.7	167.8	365.5	629.1	760.9	726.3	657.1	605.2	587.5
100°	89.4	129.9	170.3	180.4	399.8	692.3	838.5	841.1	846.1	849.8	828.7
102.5°	108.2	145.9	183.6	193.1	415.5	712.2	860.5	904.6	992.7	1058.8	1040.7
105°	139.8	171.8	203.8	211.8	427.2	714.5	858.0	956.8	1154.5	1302.7	1292.9
107.5°	172.4	202.1	231.9	239.4	429.3	682.6	809.2	947.1	1222.7	1429.5	1431.9
110°	194.2	221.2	248.2	254.9	426.1	654.4	768.6	922.7	1230.8	1461.9	1472.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	215.8	241.5	267.1	273.5	426.2	629.9	731.6	889.3	1204.7	1441.2	1456.8
115°	248.4	272.0	295.7	301.6	430.2	601.7	687.3	839.3	1143.1	1370.9	1392.4
117.5°	280.4	301.9	323.4	328.8	438.2	583.9	656.8	793.9	1068.1	1273.8	1297.7
120°	299.2	319.4	339.7	344.7	444.7	578.0	644.6	769.9	1020.4	1208.3	1231.5
122.5°	317.4	337.8	358.2	363.3	454.0	574.8	635.3	748.1	973.8	1143.0	1165.8
125°	345.5	364.0	382.7	387.3	466.6	572.3	625.1	721.0	912.6	1056.4	1077.5
127.5°	368.3	387.0	405.7	410.5	479.2	570.8	616.5	698.9	863.4	986.9	1004.6
130°	380.4	400.6	420.9	426.0	488.4	571.7	613.3	686.6	833.1	942.9	959.4
132.5°	393.0	413.2	433.5	438.6	495.9	572.3	610.5	676.1	807.2	905.5	920.2
135°	411.8	430.2	448.5	453.2	503.9	571.7	605.6	660.5	770.4	852.7	865.4
137.5°	430.9	449.1	467.4	471.9	516.2	575.2	604.8	651.3	744.1	813.7	824.1
140°	446.7	463.5	480.3	484.5	523.7	575.8	602.0	642.1	722.2	782.4	792.1
142.5°	458.9	474.4	489.9	493.8	529.9	577.9	602.0	637.2	707.7	760.5	768.9
145°	477.6	491.1	504.7	508.1	538.1	578.0	597.9	626.7	684.4	727.6	733.9
147.5°	496.3	509.5	522.7	525.9	549.9	581.9	597.9	620.6	665.8	699.9	705.1
150°	508.5	520.4	532.3	535.3	556.2	584.0	597.9	617.0	655.4	684.1	688.3
152.5°	521.1	530.2	539.1	541.4	560.2	585.4	597.9	614.3	646.9	671.5	674.7
155°	539.7	546.4	553.1	554.8	569.2	588.3	597.9	610.9	636.9	656.4	658.5
157.5°	553.5	560.0	566.6	568.2	578.1	591.3	597.9	608.0	628.2	643.4	644.8
160°	562.9	568.0	573.1	574.3	582.2	592.7	597.9	606.6	623.8	636.9	637.7
162.5°	572.3	576.1	579.9	580.9	586.6	594.2	597.9	605.2	619.9	630.8	631.6
165°	582.4	585.9	589.2	590.1	592.7	596.1	597.9	603.1	613.6	621.5	622.4
167.5°	591.8	593.4	595.1	595.4	597.6	600.5	602.0	605.4	612.3	617.4	617.8
170°	597.9	599.5	601.2	601.6	601.7	601.9	602.0	605.4	612.3	617.4	617.4
172.5°	601.2	601.6	601.9	602.0	602.0	602.0	602.0	604.7	610.1	614.2	613.9
175°	605.6	605.6	605.6	605.6	604.4	602.7	602.0	603.6	607.1	609.6	609.6
177.5°	605.6	605.6	605.6	605.6	604.6	603.3	602.7	604.1	606.8	608.9	608.5
180°	605.6	605.6	605.6	605.6	605.6	605.6	605.6	605.6	605.6	605.6	605.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	411.3	411.3
2.5°	439.1	436.4
5°	564.7	567.3
7.5°	760.4	759.1
10°	945.6	957.5
12.5°	1080.5	1083.1
15°	1162.5	1167.8
17.5°	1194.2	1195.5
20°	1195.5	1192.9
22.5°	1181.0	1178.4
25°	1163.8	1162.5
27.5°	1147.9	1149.3
30°	1141.3	1145.3
32.5°	1141.3	1147.9
35°	1144.0	1150.6
37.5°	1142.7	1150.6
40°	1137.4	1146.6
42.5°	1122.9	1129.5
45°	1100.4	1108.3
47.5°	1071.2	1076.5
50°	1034.2	1039.5
52.5°	987.9	989.3
55°	932.4	937.7
57.5°	872.9	874.2
60°	806.7	810.7
62.5°	736.6	736.6
65°	662.6	665.3
67.5°	585.9	592.5
70°	507.9	509.2
72.5°	431.2	431.2
75°	351.8	353.1
77.5°	276.4	276.4
80°	205.0	206.3
82.5°	141.5	144.2
85°	88.6	88.6
87.5°	41.0	37.1
90°	15.5	15.5
92.5°	61.8	49.6
95°	215.6	178.5
97.5°	516.7	445.9
100°	744.4	660.0
102.5°	968.4	896.2
105°	1254.1	1215.2
107.5°	1441.2	1450.6
110°	1512.5	1553.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1518.9	1581.1
115°	1478.6	1564.8
117.5°	1393.3	1488.9
120°	1324.4	1417.3
122.5°	1257.4	1349.0
125°	1161.8	1246.2
127.5°	1075.8	1147.0
130°	1025.1	1090.9
132.5°	979.2	1038.1
135°	916.2	967.0
137.5°	865.7	907.2
140°	830.9	869.8
142.5°	802.2	835.6
145°	759.2	784.5
147.5°	726.1	747.1
150°	705.3	722.2
152.5°	687.5	700.4
155°	667.0	675.5
157.5°	650.9	656.8
160°	641.2	644.6
162.5°	634.9	638.1
165°	625.7	629.2
167.5°	619.2	620.7
170°	617.4	617.4
172.5°	612.6	611.3
175°	609.6	609.6
177.5°	607.1	605.6
180°	605.6	605.6



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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	2.75	3.60	3.75	4.61	5.95	15.93	16.78	16.93	17.79	19.13
	3H	3.46	4.22	4.46	5.24	6.60	17.77	18.54	18.78	19.55	20.92
	4H	3.75	4.48	4.77	5.50	6.87	18.42	19.14	19.43	20.16	21.53
	6H	4.00	4.67	5.03	5.70	7.08	18.85	19.51	19.87	20.54	21.92
	8H	4.07	4.71	5.11	5.75	7.13	18.97	19.60	20.00	20.65	22.02
	12H	4.09	4.69	5.13	5.73	7.13	19.03	19.64	20.07	20.68	22.08
4H	2H	9.97	10.69	10.99	11.71	13.08	16.21	16.93	17.23	17.95	19.32
	3H	11.53	12.14	12.57	13.19	14.57	18.25	18.86	19.28	19.91	21.29
	4H	11.63	12.18	12.67	13.23	14.63	19.02	19.57	20.06	20.61	22.02
	6H	11.64	12.12	12.69	13.18	14.58	19.56	20.03	20.61	21.10	22.50
	8H	11.62	12.06	12.67	13.12	14.54	19.72	20.17	20.77	21.22	22.64
	12H	11.57	11.98	12.64	13.05	14.47	19.81	20.22	20.88	21.29	22.71
8H	4H	13.07	13.52	14.12	14.58	15.99	19.08	19.52	20.13	20.58	22.00
	6H	13.31	13.69	14.39	14.79	16.20	19.71	20.08	20.78	21.18	22.59
	8H	13.33	13.66	14.41	14.74	16.17	19.93	20.25	21.01	21.33	22.77
	12H	13.30	13.59	14.39	14.67	16.14	20.07	20.36	21.16	21.44	22.91
12H	4H	13.22	13.62	14.29	14.69	16.12	19.03	19.43	20.10	20.51	21.93
	6H	13.57	13.90	14.65	14.98	16.42	19.69	20.02	20.77	21.10	22.53
	8H	13.64	13.93	14.73	15.01	16.48	19.92	20.20	21.00	21.28	22.76