

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: P937937

Luminaire Tested: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937937
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

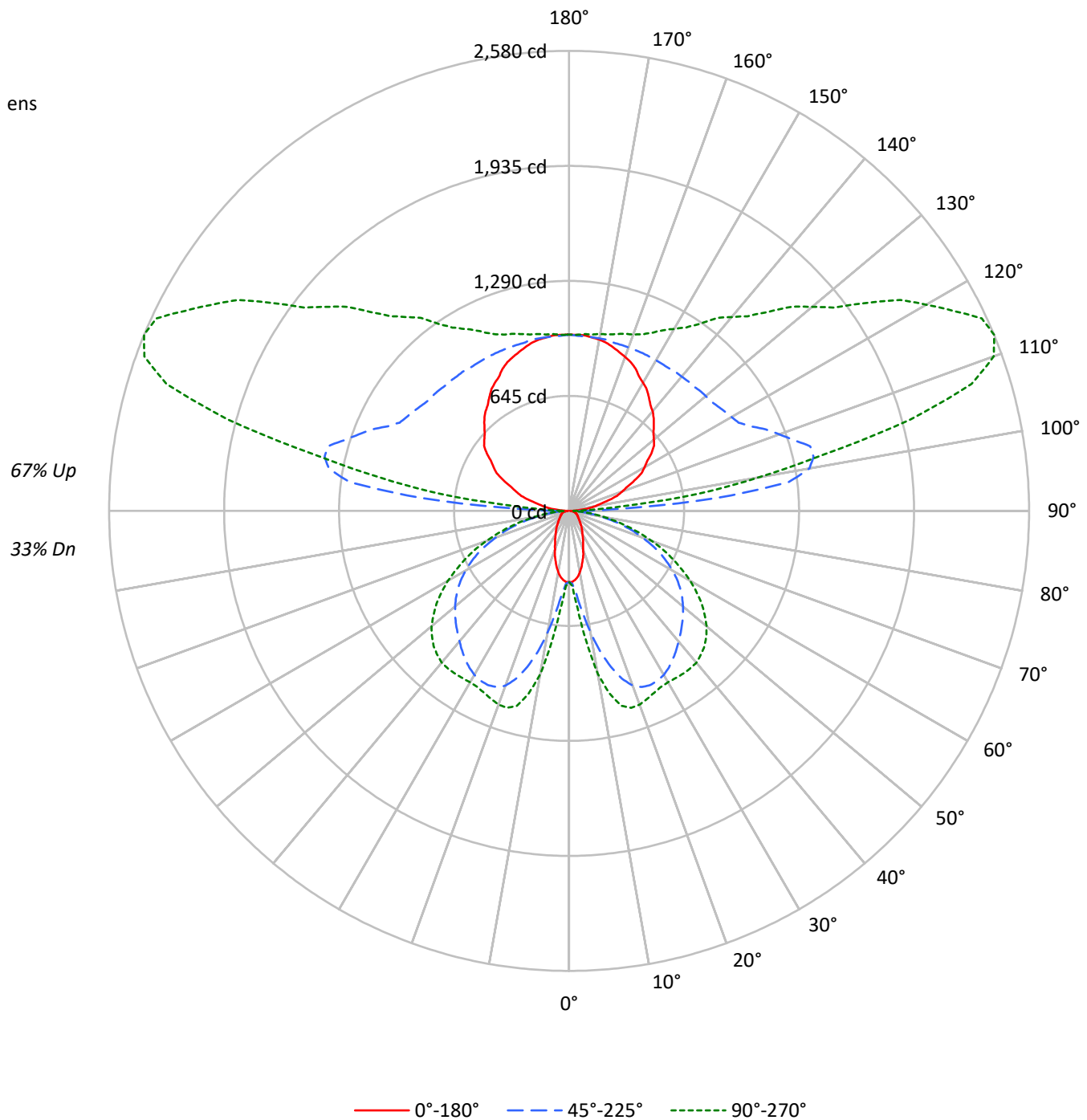
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9493.6 lumens
Efficiency: N/A
Efficacy: 113.8 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: Semi-Indirect

Input Watts (W): 83.4
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	50	30	10	0
RCR																					
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33			33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27			27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22			22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18			18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15			15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13			13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11			11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10			10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8			8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7			7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2465	2465	2465
5°	2407	2848	3313
10°	2183	4151	5493
15°	1854	5421	6633
20°	1509	6282	6760
25°	1258	6572	6623
30°	1061	6612	6610
35°	938	6500	6781
40°	816	6355	6958
45°	738	6248	6985
50°	677	6153	6869
55°	648	6013	6565
60°	663	5746	6084
65°	688	5342	5423
70°	732	4656	4582
75°	808	3792	3575
80°	876	2626	2409
85°	763	1392	1232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	0.5
10°-20°	228.4	2.4
20°-30°	399.6	4.2
30°-40°	514.4	5.4
40°-50°	574.5	6.1
50°-60°	550.3	5.8
60°-70°	436.1	4.6
70°-80°	256.4	2.7
80°-90°	75.0	0.8
90°-100°	481.8	5.1
100°-110°	1266.6	13.3
110°-120°	1313.4	13.8
120°-130°	1053.5	11.1
130°-140°	826.6	8.7
140°-150°	634.5	6.7
150°-160°	456.9	4.8
160°-170°	279.6	2.9
170°-180°	94.5	1.0
0°-30°	679.6	7.2
0°-40°	1194.0	12.6
0°-60°	2318.8	24.4
0°-90°	3086.3	32.5
90°-120°	3061.8	32.3
90°-150°	5576.3	58.7
90°-180°	6407.0	67.5
0°-180°	9493.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	550	36
15°	291	537	904	1097	1131	81
25°	186	609	1078	1125	1126	86
35°	126	582	1015	1072	1115	78
45°	86	464	897	1028	1074	66
55°	62	295	761	884	908	56
65°	49	156	565	636	644	48
75°	36	96	310	341	342	38
85°	13	30	77	85	86	14
90°	7	18	50	25	25	6
95°	64	249	830	428	291	71
105°	228	346	1400	2126	1983	242
115°	405	492	1122	2238	2554	400
125°	564	632	1020	1724	2034	501
135°	672	740	988	1392	1578	520
145°	779	829	976	1187	1280	488
155°	881	906	976	1071	1102	405
165°	951	963	976	1014	1027	268
175°	988	988	982	995	995	94
180°	988	988	988	988	988	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5
2.5°	398.5	398.5	401.0	402.3	404.9	406.1	408.7	411.3	418.9	420.2	422.8
5°	388.2	393.3	410.0	416.4	434.3	458.7	468.9	485.6	520.2	530.4	536.8
7.5°	372.8	384.4	425.4	435.6	480.4	544.5	571.4	607.3	662.4	689.3	711.1
10°	348.5	372.8	445.9	470.2	543.2	640.6	690.6	740.5	823.8	861.0	875.1
12.5°	321.6	361.3	467.6	500.9	606.0	748.2	808.4	863.5	958.3	1008.4	1016.1
15°	290.8	344.6	488.1	536.8	672.6	837.9	904.5	972.5	1060.9	1096.8	1105.8
17.5°	263.9	331.8	507.4	558.6	723.9	918.6	986.6	1043.0	1114.7	1139.1	1145.5
20°	230.6	311.3	520.2	586.8	777.7	977.6	1043.0	1086.5	1135.2	1150.6	1153.2
22.5°	206.3	289.5	527.9	597.0	813.6	1013.5	1068.6	1103.2	1136.5	1141.6	1142.9
25°	185.8	265.2	526.6	608.6	844.3	1035.3	1077.6	1103.2	1122.4	1125.0	1125.0
27.5°	166.6	238.3	521.4	611.1	867.4	1040.4	1073.7	1091.7	1100.6	1105.8	1105.8
30°	149.9	212.7	508.6	606.0	877.6	1035.3	1062.2	1071.2	1080.1	1087.8	1091.7
32.5°	137.1	188.3	489.4	595.8	878.9	1022.5	1041.7	1046.8	1059.6	1077.6	1084.0
35°	125.6	164.0	467.6	581.7	871.2	1002.0	1014.8	1019.9	1045.5	1072.4	1081.4
37.5°	114.0	146.1	439.4	557.3	859.7	977.6	986.6	995.6	1035.3	1067.3	1077.6
40°	102.5	130.7	406.1	530.4	841.7	948.1	955.8	969.9	1022.5	1059.6	1069.9
42.5°	93.5	117.9	370.3	502.2	818.7	914.8	926.3	946.8	1007.1	1046.8	1058.4
45°	85.8	105.1	331.8	463.8	789.2	880.2	896.8	925.0	989.2	1027.6	1037.9
47.5°	78.2	96.1	292.1	424.1	757.2	845.6	867.4	899.4	964.7	1002.0	1010.9
50°	71.7	87.1	252.4	381.8	722.6	808.4	834.1	867.4	934.0	968.6	980.2
52.5°	66.6	79.4	215.2	339.5	682.9	770.0	799.5	834.1	896.8	930.1	937.8
55°	61.5	73.0	183.2	294.7	641.9	729.0	761.0	794.3	855.8	884.0	889.1
57.5°	58.9	67.9	156.3	252.4	598.3	682.9	718.7	749.5	807.2	828.9	834.1
60°	55.1	64.1	135.8	216.5	550.9	639.3	670.1	700.8	749.5	767.4	771.3
62.5°	51.2	61.5	120.4	181.9	502.2	588.1	618.8	647.0	688.0	700.8	705.9
65°	48.7	58.9	108.9	156.3	452.3	534.3	565.0	589.3	622.7	635.5	638.0
67.5°	46.1	56.4	99.9	134.5	402.3	480.4	503.5	526.6	552.2	565.0	566.3
70°	42.3	53.8	92.2	119.2	351.0	418.9	438.2	462.5	483.0	489.4	493.3
72.5°	39.7	50.0	87.1	107.6	298.5	360.0	378.0	392.0	410.0	416.4	416.4
75°	35.9	44.8	82.0	96.1	244.7	294.7	310.0	324.1	338.2	340.8	337.0
77.5°	32.0	39.7	70.5	80.7	190.9	233.2	246.0	253.7	265.2	267.8	269.1
80°	26.9	34.6	55.1	62.8	138.4	171.7	180.6	187.1	197.3	197.3	199.9
82.5°	20.5	26.9	39.7	44.8	93.5	117.9	125.6	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.4	71.7	76.9	78.2	83.3	84.6	84.6
87.5°	6.4	9.0	16.7	17.9	29.5	37.2	37.2	39.7	39.7	38.4	37.2
90°	6.7	12.0	17.3	18.5	29.1	43.3	50.4	44.8	33.6	25.2	25.2
92.5°	26.6	71.7	116.8	128.0	180.0	249.2	283.9	248.8	178.7	126.1	121.0
95°	63.7	146.2	228.7	249.4	442.9	700.9	829.9	740.5	561.8	427.8	412.6
97.5°	110.1	182.9	255.7	273.9	596.5	1026.7	1241.8	1185.4	1072.4	987.7	958.8
100°	146.0	212.0	278.0	294.5	652.5	1129.8	1368.5	1372.6	1380.9	1387.0	1352.6
102.5°	176.5	238.0	299.7	315.1	678.2	1162.2	1404.3	1476.2	1620.1	1728.0	1698.5
105°	228.2	280.4	332.5	345.6	697.1	1166.0	1400.3	1561.6	1884.1	2126.0	2110.1
107.5°	281.3	329.9	378.5	390.7	700.7	1114.0	1320.7	1545.7	1995.6	2333.0	2336.8
110°	317.1	361.0	404.9	415.9	695.3	1068.0	1254.4	1505.8	2008.8	2386.1	2402.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	352.2	394.1	435.9	446.5	695.6	1027.9	1194.0	1451.3	1966.1	2352.2	2377.6
115°	405.3	443.9	482.6	492.2	702.1	981.8	1121.7	1369.7	1865.6	2237.5	2272.7
117.5°	457.7	492.8	527.9	536.6	715.1	953.0	1071.9	1295.7	1743.3	2078.9	2117.9
120°	488.2	521.3	554.2	562.5	725.7	943.2	1052.0	1256.5	1665.4	1972.1	2010.0
122.5°	518.1	551.4	584.7	593.0	741.0	938.2	1036.8	1221.0	1589.2	1865.3	1902.7
125°	563.8	594.2	624.5	632.1	761.5	934.0	1020.3	1176.6	1489.4	1724.1	1758.5
127.5°	601.0	631.6	662.3	670.0	782.1	931.6	1006.3	1140.6	1409.2	1610.6	1639.7
130°	620.9	653.9	686.9	695.2	797.1	933.0	1001.0	1120.5	1359.6	1539.0	1565.8
132.5°	641.5	674.5	707.5	715.8	809.3	934.0	996.3	1103.4	1317.4	1477.9	1501.9
135°	671.9	702.0	732.1	739.6	822.5	933.1	988.4	1078.0	1257.3	1391.7	1412.4
137.5°	703.1	732.9	762.7	770.2	842.4	938.9	987.0	1062.8	1214.3	1328.0	1344.9
140°	729.0	756.4	783.8	790.7	854.6	939.8	982.4	1047.8	1178.8	1276.9	1292.8
142.5°	748.9	774.3	799.6	806.0	864.8	943.2	982.4	1039.9	1154.9	1241.1	1254.8
145°	779.4	801.5	823.6	829.2	878.0	943.2	975.8	1022.8	1116.9	1187.4	1197.7
147.5°	810.0	831.5	853.0	858.4	897.5	949.7	975.8	1012.7	1086.8	1142.3	1150.9
150°	829.9	849.3	868.7	873.6	907.7	953.0	975.8	1007.0	1069.5	1116.4	1123.3
152.5°	850.4	865.1	879.9	883.6	914.3	955.3	975.8	1002.4	1055.8	1095.8	1101.1
155°	880.9	891.9	902.7	905.5	928.9	960.1	975.8	997.0	1039.5	1071.3	1074.8
157.5°	903.5	914.1	924.7	927.3	943.5	965.0	975.8	992.2	1025.3	1050.1	1052.5
160°	918.7	927.0	935.3	937.3	950.1	967.2	975.8	989.9	1018.2	1039.5	1040.8
162.5°	934.0	940.1	946.4	947.9	957.2	969.6	975.8	987.7	1011.5	1029.5	1030.8
165°	950.6	956.2	961.8	963.2	967.4	972.9	975.8	984.3	1001.5	1014.3	1015.6
167.5°	965.8	968.5	971.1	971.8	975.3	980.0	982.4	988.1	999.2	1007.6	1008.2
170°	975.8	978.4	981.1	981.7	982.0	982.2	982.4	988.1	999.2	1007.6	1007.6
172.5°	981.1	981.6	982.2	982.4	982.4	982.4	982.4	986.9	995.7	1002.3	1001.8
175°	988.4	988.4	988.4	988.4	986.4	983.8	982.4	985.2	990.9	995.1	995.1
177.5°	988.4	988.4	988.4	988.4	986.9	984.7	983.7	985.9	990.4	993.7	993.1
180°	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.5	398.5
2.5°	425.4	422.8
5°	547.1	549.6
7.5°	736.7	735.4
10°	916.1	927.6
12.5°	1046.8	1049.4
15°	1126.3	1131.4
17.5°	1157.0	1158.3
20°	1158.3	1155.7
22.5°	1144.2	1141.6
25°	1127.5	1126.3
27.5°	1112.2	1113.4
30°	1105.8	1109.6
32.5°	1105.8	1112.2
35°	1108.3	1114.7
37.5°	1107.0	1114.7
40°	1101.9	1110.9
42.5°	1087.8	1094.2
45°	1066.0	1073.7
47.5°	1037.9	1043.0
50°	1002.0	1007.1
52.5°	957.1	958.3
55°	903.2	908.4
57.5°	845.6	846.9
60°	781.5	785.4
62.5°	713.6	713.6
65°	641.9	644.4
67.5°	567.6	574.0
70°	492.0	493.3
72.5°	417.7	417.7
75°	340.8	342.1
77.5°	267.8	267.8
80°	198.6	199.9
82.5°	137.1	139.6
85°	85.8	85.8
87.5°	39.7	35.9
90°	25.2	25.2
92.5°	101.0	80.9
95°	351.9	291.2
97.5°	843.3	727.7
100°	1215.0	1077.3
102.5°	1580.6	1462.7
105°	2046.7	1983.4
107.5°	2352.1	2367.5
110°	2468.6	2534.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2478.9	2580.4
115°	2413.3	2553.8
117.5°	2273.9	2429.8
120°	2161.5	2313.1
122.5°	2052.1	2201.6
125°	1896.2	2033.8
127.5°	1755.8	1872.0
130°	1673.2	1780.4
132.5°	1598.1	1694.2
135°	1495.2	1578.1
137.5°	1412.7	1480.5
140°	1356.2	1419.6
142.5°	1309.3	1363.9
145°	1239.0	1280.3
147.5°	1185.1	1219.3
150°	1151.1	1178.8
152.5°	1122.0	1142.9
155°	1088.7	1102.5
157.5°	1062.2	1071.9
160°	1046.5	1052.0
162.5°	1036.1	1041.4
165°	1021.3	1026.8
167.5°	1010.5	1012.9
170°	1007.6	1007.6
172.5°	999.8	997.7
175°	995.1	995.1
177.5°	990.8	988.4
180°	988.4	988.4



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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	2.27	3.02	3.36	4.11	5.61	15.44	16.18	16.53	17.27	18.77
	3H	2.97	3.64	4.07	4.74	6.25	17.26	17.93	18.36	19.03	20.55
	4H	3.26	3.90	4.37	5.00	6.52	17.90	18.54	19.01	19.64	21.16
	6H	3.51	4.09	4.62	5.19	6.73	18.32	18.91	19.44	20.01	21.54
	8H	3.57	4.13	4.69	5.25	6.77	18.43	18.99	19.55	20.11	21.64
	12H	3.58	4.11	4.71	5.23	6.78	18.50	19.03	19.62	20.14	21.69
4H	2H	9.46	10.10	10.58	11.20	12.72	15.70	16.33	16.81	17.43	18.96
	3H	11.02	11.55	12.14	12.68	14.21	17.73	18.26	18.85	19.39	20.92
	4H	11.11	11.60	12.24	12.72	14.27	18.49	18.98	19.61	20.09	21.65
	6H	11.12	11.54	12.25	12.68	14.22	19.01	19.43	20.15	20.57	22.12
	8H	11.09	11.48	12.22	12.61	14.18	19.17	19.56	20.30	20.69	22.26
	12H	11.04	11.40	12.19	12.54	14.11	19.26	19.61	20.41	20.75	22.32
8H	4H	12.54	12.94	13.68	14.07	15.63	18.54	18.93	19.67	20.06	21.62
	6H	12.78	13.10	13.93	14.28	15.84	19.16	19.48	20.31	20.65	22.21
	8H	12.80	13.08	13.96	14.23	15.81	19.37	19.66	20.53	20.81	22.39
	12H	12.76	13.01	13.92	14.16	15.77	19.51	19.76	20.67	20.91	22.52
12H	4H	12.68	13.04	13.83	14.18	15.75	18.48	18.84	19.63	19.98	21.55
	6H	13.04	13.32	14.20	14.47	16.05	19.14	19.42	20.30	20.57	22.15
	8H	13.10	13.35	14.26	14.50	16.11	19.36	19.61	20.52	20.76	22.37