

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: P937837

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937837
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

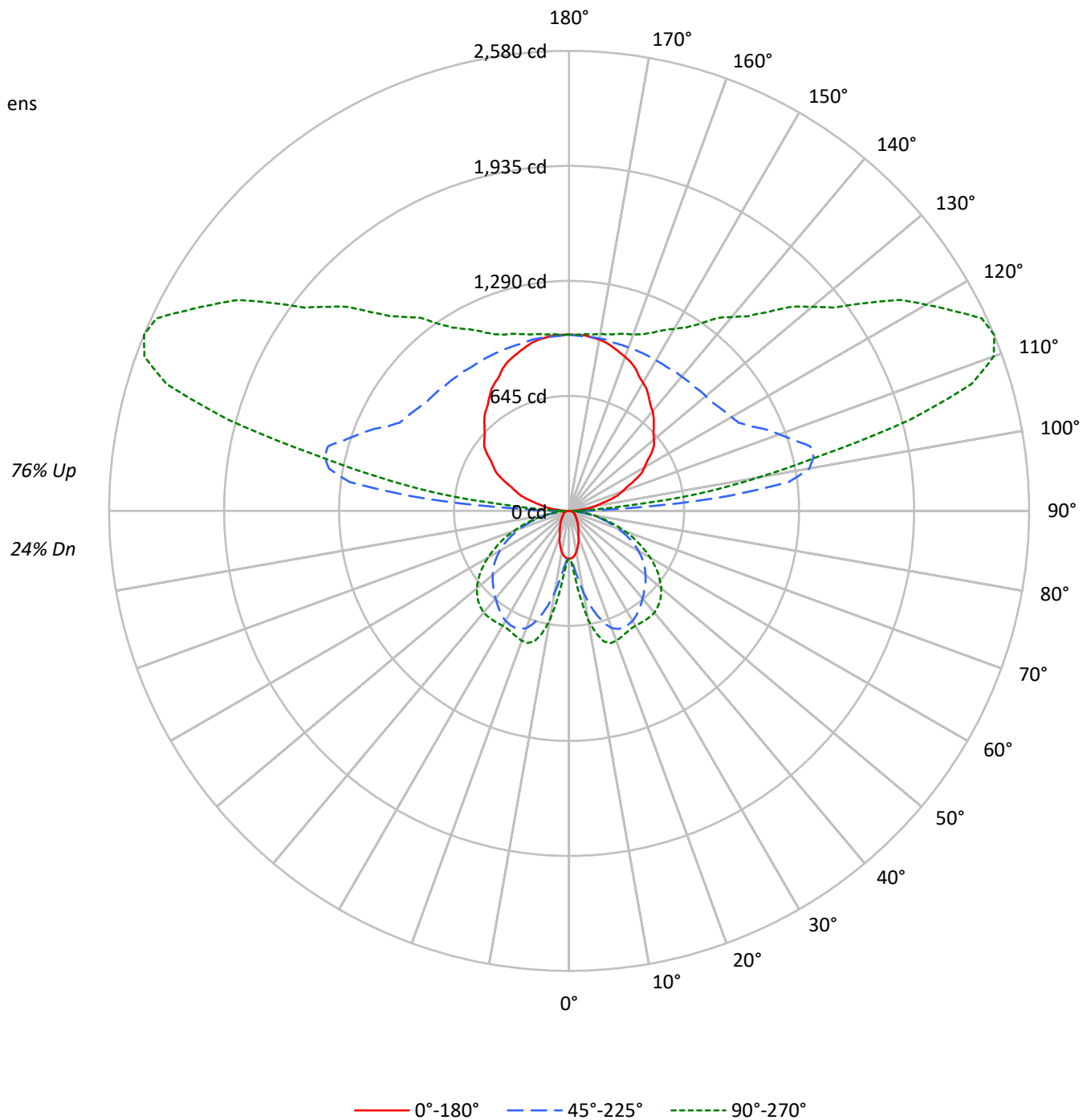
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8478.0 lumens
Efficiency: N/A
Efficacy: 118.7 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): 71.4
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

TEST NUMBER: P937837
CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-2700K

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1653	1653	1653
5°	1614	1910	2222
10°	1464	2784	3683
15°	1243	3635	4447
20°	1012	4212	4533
25°	844	4406	4441
30°	711	4434	4432
35°	629	4358	4547
40°	548	4262	4665
45°	496	4190	4683
50°	454	4126	4606
55°	435	4032	4402
60°	445	3854	4080
65°	461	3582	3636
70°	491	3122	3072
75°	542	2543	2398
80°	586	1761	1615
85°	513	934	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4683 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.6	0.4
10°-20°	153.2	1.8
20°-30°	267.9	3.2
30°-40°	344.9	4.1
40°-50°	385.3	4.5
50°-60°	369.0	4.4
60°-70°	292.4	3.4
70°-80°	171.9	2.0
80°-90°	51.5	0.6
90°-100°	481.8	5.7
100°-110°	1266.6	14.9
110°-120°	1313.4	15.5
120°-130°	1053.5	12.4
130°-140°	826.6	9.7
140°-150°	634.5	7.5
150°-160°	456.9	5.4
160°-170°	279.6	3.3
170°-180°	94.5	1.1
0°-30°	455.7	5.4
0°-40°	800.6	9.4
0°-60°	1554.8	18.3
0°-90°	2070.8	24.4
90°-120°	3061.8	36.1
90°-150°	5576.3	65.8
90°-180°	6407.0	75.6
0°-180°	8478.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	260	279	314	356	369	24
15°	195	360	606	735	759	54
25°	125	408	722	754	755	57
35°	84	390	680	719	747	53
45°	58	311	601	689	720	45
55°	41	198	510	593	609	38
65°	33	105	379	426	432	32
75°	24	64	208	229	229	25
85°	9	20	52	57	58	9
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°	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2
2.5°	267.2	267.2	268.9	269.7	271.5	272.4	274.1	275.8	280.9	281.8	283.5
5°	260.3	263.8	274.9	279.2	291.3	307.6	314.4	325.6	348.8	355.7	360.0
7.5°	250.0	257.8	285.2	292.1	322.2	365.1	383.2	407.2	444.1	462.3	476.9
10°	233.7	250.0	298.9	315.3	364.3	429.5	463.1	496.6	552.4	577.3	586.8
12.5°	215.7	242.3	313.6	335.9	406.4	501.7	542.1	579.1	642.6	676.1	681.3
15°	195.0	231.1	327.3	360.0	451.1	561.8	606.5	652.1	711.4	735.4	741.5
17.5°	177.0	222.5	340.2	374.6	485.4	616.0	661.5	699.4	747.4	763.8	768.0
20°	154.7	208.7	348.8	393.5	521.5	655.5	699.4	728.6	761.2	771.5	773.2
22.5°	138.3	194.1	354.0	400.3	545.5	679.5	716.5	739.7	762.1	765.5	766.3
25°	124.6	177.8	353.1	408.1	566.2	694.1	722.5	739.7	752.6	754.3	754.3
27.5°	111.7	159.8	349.7	409.8	581.7	697.7	719.9	732.0	738.0	741.5	741.5
30°	100.5	142.6	341.1	406.4	588.5	694.1	712.3	718.2	724.2	729.4	732.0
32.5°	91.9	126.3	328.2	399.5	589.3	685.6	698.5	701.9	710.5	722.5	726.9
35°	84.2	110.0	313.6	390.1	584.2	671.9	680.4	683.9	701.1	719.1	725.1
37.5°	76.4	98.0	294.7	373.8	576.5	655.5	661.5	667.6	694.1	715.7	722.5
40°	68.8	87.6	272.4	355.7	564.5	635.7	640.9	650.3	685.6	710.5	717.4
42.5°	62.7	79.0	248.3	336.8	548.9	613.4	621.1	634.9	675.3	701.9	709.6
45°	57.6	70.5	222.5	311.0	529.2	590.2	601.4	620.3	663.2	689.0	695.9
47.5°	52.4	64.4	195.9	284.3	507.8	567.1	581.7	603.1	646.9	671.9	677.8
50°	48.1	58.4	169.3	256.0	484.5	542.1	559.3	581.7	626.3	649.5	657.3
52.5°	44.7	53.3	144.3	227.7	457.9	516.3	536.1	559.3	601.4	623.8	628.9
55°	41.3	48.9	122.8	197.6	430.4	488.8	510.3	532.6	573.9	592.8	596.3
57.5°	39.5	45.5	104.8	169.3	401.2	457.9	482.0	502.6	541.3	555.9	559.3
60°	37.0	43.0	91.1	145.2	369.4	428.7	449.4	469.9	502.6	514.6	517.2
62.5°	34.3	41.3	80.8	122.0	336.8	394.4	414.9	433.9	461.3	469.9	473.4
65°	32.6	39.5	73.0	104.8	303.3	358.2	378.9	395.2	417.5	426.1	427.8
67.5°	30.9	37.8	67.0	90.2	269.7	322.2	337.6	353.1	370.3	378.9	379.7
70°	28.4	36.0	61.8	79.9	235.4	280.9	293.8	310.1	323.9	328.2	330.8
72.5°	26.6	33.5	58.4	72.2	200.2	241.4	253.4	262.9	274.9	279.2	279.2
75°	24.1	30.1	55.0	64.4	164.1	197.6	207.9	217.4	226.8	228.6	225.9
77.5°	21.4	26.6	47.2	54.2	128.0	156.4	164.9	170.1	177.8	179.5	180.4
80°	18.0	23.2	37.0	42.1	92.8	115.1	121.1	125.5	132.3	132.3	134.0
82.5°	13.8	18.0	26.6	30.1	62.7	79.0	84.2	86.8	91.1	91.1	91.1
85°	8.6	11.2	17.2	19.7	37.8	48.1	51.6	52.4	55.9	56.7	56.7
87.5°	4.3	6.0	11.2	12.0	19.7	24.9	24.9	26.6	26.6	25.8	24.9
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°	267.2	267.2
2.5°	285.2	283.5
5°	366.8	368.6
7.5°	494.0	493.2
10°	614.3	622.0
12.5°	701.9	703.6
15°	755.2	758.6
17.5°	775.8	776.7
20°	776.7	775.0
22.5°	767.2	765.5
25°	756.1	755.2
27.5°	745.7	746.6
30°	741.5	744.0
32.5°	741.5	745.7
35°	743.2	747.4
37.5°	742.3	747.4
40°	738.8	744.9
42.5°	729.4	733.7
45°	714.8	719.9
47.5°	695.9	699.4
50°	671.9	675.3
52.5°	641.8	642.6
55°	605.7	609.2
57.5°	567.1	567.9
60°	524.1	526.7
62.5°	478.6	478.6
65°	430.4	432.1
67.5°	380.6	384.9
70°	329.9	330.8
72.5°	280.1	280.1
75°	228.6	229.4
77.5°	179.5	179.5
80°	133.2	134.0
82.5°	91.9	93.6
85°	57.6	57.6
87.5°	26.6	24.1
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	0.00	0.42	0.88	1.55	3.15	12.90	13.58	14.04	14.72	16.31
	3H	0.42	1.04	1.57	2.18	3.79	14.72	15.33	15.87	16.48	18.09
	4H	0.71	1.30	1.87	2.44	4.06	15.35	15.94	16.51	17.08	18.70
	6H	0.95	1.49	2.12	2.64	4.26	15.77	16.31	16.94	17.45	19.08
	8H	1.02	1.53	2.19	2.69	4.31	15.88	16.39	17.05	17.56	19.17
	12H	1.03	1.51	2.20	2.67	4.31	15.94	16.43	17.12	17.58	19.22
4H	2H	6.92	7.50	8.09	8.65	10.26	13.15	13.74	14.32	14.88	16.49
	3H	8.47	8.96	9.64	10.13	11.75	15.17	15.66	16.35	16.83	18.46
	4H	8.56	9.01	9.73	10.17	11.81	15.93	16.38	17.11	17.54	19.18
	6H	8.56	8.94	9.74	10.12	11.76	16.45	16.84	17.64	18.02	19.66
	8H	8.53	8.89	9.71	10.06	11.71	16.61	16.97	17.79	18.14	19.79
	12H	8.48	8.80	9.67	9.99	11.64	16.69	17.02	17.89	18.20	19.86
8H	4H	9.98	10.34	11.16	11.52	13.17	15.98	16.34	17.16	17.51	19.16
	6H	10.22	10.51	11.42	11.73	13.38	16.59	16.89	17.79	18.11	19.75
	8H	10.23	10.49	11.44	11.68	13.35	16.81	17.07	18.01	18.26	19.93
	12H	10.19	10.42	11.40	11.61	13.31	16.94	17.17	18.15	18.36	20.06
12H	4H	10.12	10.44	11.31	11.63	13.28	15.92	16.25	17.12	17.43	19.09
	6H	10.47	10.73	11.68	11.92	13.59	16.57	16.83	17.78	18.02	19.69
	8H	10.53	10.76	11.74	11.95	13.65	16.79	17.02	18.00	18.21	19.91