

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: P937838

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

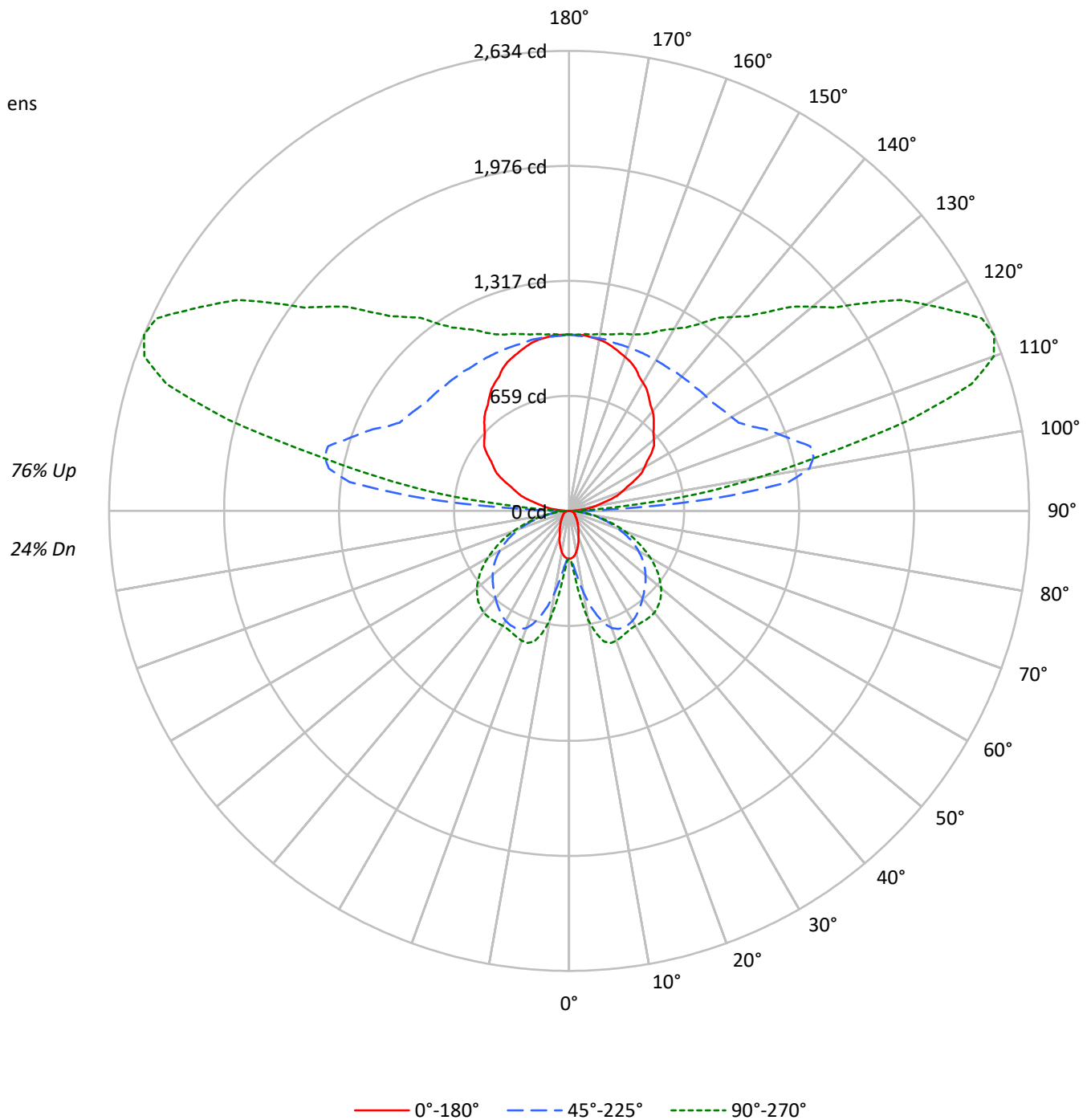
Test Method: LM-79-2019  
Report Number: P937838  
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8655.8 lumens  
Efficiency: N/A  
Efficacy: 121.2 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<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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

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

	0°	45°	90°
0°	1688	1688	1688
5°	1648	1950	2268
10°	1494	2842	3760
15°	1269	3711	4541
20°	1033	4300	4628
25°	862	4499	4534
30°	726	4526	4525
35°	642	4450	4642
40°	559	4351	4763
45°	506	4278	4781
50°	463	4212	4702
55°	444	4116	4494
60°	455	3934	4165
65°	471	3657	3713
70°	502	3188	3136
75°	554	2597	2448
80°	599	1799	1649
85°	525	954	845

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4781 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.3	0.4
10°-20°	156.4	1.8
20°-30°	273.6	3.2
30°-40°	352.2	4.1
40°-50°	393.3	4.5
50°-60°	376.7	4.4
60°-70°	298.6	3.4
70°-80°	175.6	2.0
80°-90°	52.6	0.6
90°-100°	491.9	5.7
100°-110°	1293.2	14.9
110°-120°	1340.9	15.5
120°-130°	1075.6	12.4
130°-140°	843.9	9.7
140°-150°	647.8	7.5
150°-160°	466.5	5.4
160°-170°	285.4	3.3
170°-180°	96.4	1.1
0°-30°	465.2	5.4
0°-40°	817.4	9.4
0°-60°	1587.4	18.3
0°-90°	2114.2	24.4
90°-120°	3126.0	36.1
90°-150°	5693.3	65.8
90°-180°	6542.0	75.6
0°-180°	8655.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	273	273	273	273	273	
5°	266	285	321	363	376	25
15°	199	368	619	751	774	55
25°	127	417	738	770	771	59
35°	86	398	695	734	763	54
45°	59	318	614	704	735	45
55°	42	202	521	605	622	38
65°	33	107	387	435	441	33
75°	25	66	212	233	234	26
85°	9	20	53	58	59	9
90°	7	19	52	26	26	6
95°	65	255	847	437	297	72
105°	233	353	1430	2171	2025	247
115°	414	503	1145	2284	2607	409
125°	576	645	1042	1760	2076	511
135°	686	755	1009	1421	1611	531
145°	796	847	996	1212	1307	499
155°	899	924	996	1094	1126	413
165°	970	983	996	1036	1048	274
175°	1009	1009	1003	1016	1016	96
180°	1009	1009	1009	1009	1009	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8
2.5°	272.8	272.8	274.5	275.4	277.2	278.1	279.8	281.6	286.8	287.7	289.4
5°	265.8	269.3	280.7	285.1	297.4	314.0	321.0	332.4	356.1	363.1	367.6
7.5°	255.2	263.2	291.2	298.2	328.9	372.8	391.2	415.8	453.5	471.9	486.9
10°	238.6	255.2	305.2	322.0	371.9	438.5	472.8	507.0	564.0	589.4	599.1
12.5°	220.2	247.4	320.1	343.0	414.9	512.2	553.5	591.2	656.1	690.3	695.5
15°	199.1	236.0	334.2	367.6	460.5	573.6	619.2	665.8	726.3	750.8	757.0
17.5°	180.7	227.2	347.3	382.5	495.6	628.9	675.4	714.0	763.1	779.8	784.1
20°	157.9	213.1	356.1	401.7	532.5	669.3	714.0	743.8	777.2	787.7	789.5
22.5°	141.2	198.2	361.4	408.7	557.0	693.8	731.5	755.2	778.0	781.5	782.4
25°	127.2	181.6	360.5	416.7	578.1	708.7	737.7	755.2	768.3	770.1	770.1
27.5°	114.1	163.2	357.0	418.4	593.9	712.3	735.0	747.3	753.4	757.0	757.0
30°	102.6	145.6	348.2	414.9	600.8	708.7	727.2	733.3	739.4	744.7	747.3
32.5°	93.8	129.0	335.0	407.9	601.7	700.0	713.1	716.6	725.4	737.7	742.1
35°	86.0	112.3	320.1	398.3	596.5	685.9	694.7	698.2	715.8	734.2	740.3
37.5°	78.0	100.0	300.9	381.6	588.5	669.3	675.4	681.6	708.7	730.7	737.7
40°	70.2	89.5	278.1	363.1	576.3	649.1	654.4	664.0	700.0	725.4	732.4
42.5°	64.0	80.7	253.5	343.8	560.5	626.3	634.1	648.2	689.4	716.6	724.5
45°	58.8	71.9	227.2	317.5	540.3	602.6	614.0	633.3	677.1	703.5	710.4
47.5°	53.5	65.8	200.0	290.3	518.4	578.9	593.9	615.7	660.5	685.9	692.0
50°	49.1	59.6	172.8	261.3	494.7	553.5	571.0	593.9	639.5	663.1	671.0
52.5°	45.6	54.4	147.4	232.5	467.5	527.1	547.4	571.0	614.0	636.8	642.1
55°	42.1	50.0	125.4	201.7	439.4	499.1	521.0	543.8	585.9	605.2	608.8
57.5°	40.4	46.5	107.0	172.8	409.6	467.5	492.1	513.1	552.6	567.5	571.0
60°	37.8	43.9	93.0	148.2	377.2	437.7	458.8	479.8	513.1	525.4	528.0
62.5°	35.1	42.1	82.5	124.5	343.8	402.6	423.6	443.0	471.0	479.8	483.3
65°	33.3	40.4	74.6	107.0	309.7	365.7	386.8	403.5	426.3	435.1	436.8
67.5°	31.6	38.6	68.5	92.1	275.4	328.9	344.7	360.5	378.0	386.8	387.7
70°	29.0	36.8	63.1	81.5	240.3	286.8	300.0	316.6	330.7	335.0	337.7
72.5°	27.2	34.2	59.6	73.7	204.4	246.4	258.7	268.4	280.7	285.1	285.1
75°	24.6	30.7	56.2	65.8	167.5	201.7	212.3	221.9	231.5	233.4	230.7
77.5°	21.9	27.2	48.2	55.3	130.7	159.7	168.4	173.7	181.6	183.3	184.2
80°	18.4	23.7	37.8	43.0	94.7	117.6	123.7	128.1	135.1	135.1	136.8
82.5°	14.0	18.4	27.2	30.7	64.0	80.7	86.0	88.6	93.0	93.0	93.0
85°	8.8	11.4	17.5	20.1	38.6	49.1	52.7	53.5	57.0	57.9	57.9
87.5°	4.4	6.1	11.4	12.3	20.1	25.5	25.5	27.2	27.2	26.3	25.5
90°	6.8	12.2	17.6	18.9	29.7	44.2	51.5	45.7	34.3	25.7	25.7
92.5°	27.1	73.2	119.2	130.7	183.7	254.5	289.9	254.0	182.4	128.7	123.6
95°	65.1	149.3	233.5	254.6	452.1	715.6	847.3	756.1	573.6	436.8	421.3
97.5°	112.4	186.7	261.1	279.7	609.0	1048.3	1267.9	1210.2	1094.9	1008.4	978.9
100°	149.0	216.4	283.8	300.7	666.1	1153.5	1397.2	1401.4	1409.8	1416.1	1381.0
102.5°	180.2	243.0	306.0	321.7	692.4	1186.6	1433.7	1507.1	1654.1	1764.2	1734.1
105°	233.0	286.3	339.5	352.8	711.8	1190.4	1429.7	1594.3	1923.6	2170.6	2154.4
107.5°	287.2	336.8	386.5	398.9	715.4	1137.4	1348.4	1578.1	2037.4	2381.9	2385.8
110°	323.7	368.5	413.3	424.6	709.9	1090.4	1280.7	1537.4	2050.9	2436.1	2452.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	359.6	402.4	445.1	455.8	710.2	1049.4	1219.0	1481.8	2007.3	2401.5	2427.4
115°	413.8	453.2	492.7	502.6	716.8	1002.4	1145.2	1398.4	1904.7	2284.4	2320.3
117.5°	467.3	503.2	538.9	547.9	730.1	972.9	1094.4	1322.9	1779.8	2122.5	2162.3
120°	498.5	532.2	565.9	574.3	740.9	963.0	1074.1	1282.8	1700.3	2013.4	2052.2
122.5°	529.0	563.0	597.0	605.5	756.5	957.8	1058.6	1246.6	1622.5	1904.4	1942.5
125°	575.6	606.7	637.6	645.4	777.5	953.6	1041.6	1201.3	1520.7	1760.2	1795.3
127.5°	613.6	644.9	676.2	684.0	798.5	951.1	1027.4	1164.5	1438.8	1644.4	1674.0
130°	633.9	667.6	701.3	709.7	813.8	952.5	1021.9	1144.0	1388.1	1571.2	1598.6
132.5°	654.9	688.6	722.3	730.8	826.3	953.6	1017.2	1126.5	1345.0	1508.9	1533.4
135°	686.0	716.7	747.4	755.1	839.8	952.7	1009.1	1100.6	1283.6	1420.9	1442.0
137.5°	717.9	748.3	778.7	786.3	860.1	958.5	1007.7	1085.1	1239.8	1355.8	1373.1
140°	744.3	772.3	800.3	807.2	872.5	959.5	1003.0	1069.8	1203.5	1303.7	1319.9
142.5°	764.6	790.5	816.4	822.9	882.9	963.0	1003.0	1061.7	1179.1	1267.2	1281.1
145°	795.7	818.3	840.9	846.6	896.5	963.0	996.2	1044.3	1140.3	1212.3	1222.9
147.5°	826.9	848.9	870.9	876.4	916.3	969.6	996.2	1034.0	1109.6	1166.3	1175.0
150°	847.3	867.2	886.9	891.9	926.7	973.0	996.2	1028.1	1092.0	1139.8	1146.9
152.5°	868.2	883.3	898.4	902.1	933.5	975.3	996.2	1023.4	1077.9	1118.8	1124.1
155°	899.4	910.6	921.7	924.4	948.3	980.3	996.2	1017.9	1061.3	1093.8	1097.4
157.5°	922.4	933.3	944.1	946.8	963.2	985.2	996.2	1013.0	1046.8	1072.1	1074.5
160°	938.0	946.4	954.9	957.0	970.1	987.5	996.2	1010.7	1039.6	1061.3	1062.7
162.5°	953.6	959.8	966.2	967.8	977.3	989.9	996.2	1008.4	1032.7	1051.1	1052.5
165°	970.5	976.2	982.0	983.4	987.7	993.3	996.2	1004.9	1022.5	1035.5	1036.9
167.5°	986.1	988.8	991.5	992.2	995.8	1000.6	1003.0	1008.8	1020.2	1028.7	1029.3
170°	996.2	998.9	1001.6	1002.3	1002.6	1002.8	1003.0	1008.8	1020.2	1028.7	1028.7
172.5°	1001.6	1002.2	1002.8	1003.0	1003.0	1003.0	1003.0	1007.5	1016.5	1023.3	1022.8
175°	1009.1	1009.1	1009.1	1009.1	1007.1	1004.4	1003.0	1005.9	1011.6	1015.9	1015.9
177.5°	1009.1	1009.1	1009.1	1009.1	1007.5	1005.4	1004.3	1006.6	1011.1	1014.5	1013.9
180°	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1	1009.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	272.8	272.8
2.5°	291.2	289.4
5°	374.5	376.3
7.5°	504.4	503.5
10°	627.2	635.0
12.5°	716.6	718.4
15°	771.1	774.5
17.5°	792.1	792.9
20°	792.9	791.2
22.5°	783.3	781.5
25°	771.9	771.1
27.5°	761.4	762.2
30°	757.0	759.6
32.5°	757.0	761.4
35°	758.8	763.1
37.5°	757.9	763.1
40°	754.3	760.5
42.5°	744.7	749.1
45°	729.8	735.0
47.5°	710.4	714.0
50°	685.9	689.4
52.5°	655.2	656.1
55°	618.4	621.9
57.5°	578.9	579.8
60°	535.1	537.7
62.5°	488.6	488.6
65°	439.4	441.2
67.5°	388.6	392.9
70°	336.9	337.7
72.5°	285.9	285.9
75°	233.4	234.2
77.5°	183.3	183.3
80°	136.0	136.8
82.5°	93.8	95.6
85°	58.8	58.8
87.5°	27.2	24.6
90°	25.7	25.7
92.5°	103.1	82.6
95°	359.3	297.3
97.5°	861.0	743.0
100°	1240.5	1099.9
102.5°	1613.7	1493.4
105°	2089.7	2025.0
107.5°	2401.4	2417.1
110°	2520.4	2587.8





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2530.9	2634.5
115°	2463.8	2607.4
117.5°	2321.5	2480.8
120°	2206.9	2361.6
122.5°	2095.1	2247.8
125°	1935.9	2076.5
127.5°	1792.6	1911.2
130°	1708.2	1817.8
132.5°	1631.6	1729.7
135°	1526.6	1611.2
137.5°	1442.3	1511.6
140°	1384.6	1449.3
142.5°	1336.7	1392.5
145°	1265.0	1307.1
147.5°	1209.9	1244.8
150°	1175.2	1203.5
152.5°	1145.5	1166.9
155°	1111.5	1125.6
157.5°	1084.5	1094.4
160°	1068.4	1074.1
162.5°	1057.9	1063.3
165°	1042.7	1048.4
167.5°	1031.7	1034.1
170°	1028.7	1028.7
172.5°	1020.7	1018.6
175°	1015.9	1015.9
177.5°	1011.6	1009.1
180°	1009.1	1009.1



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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	0.49	0.95	1.63	3.22	12.97	13.66	14.11	14.79	16.39
	3H	0.50	1.11	1.65	2.26	3.86	14.79	15.41	15.94	16.55	18.16
	4H	0.79	1.37	1.95	2.52	4.13	15.42	16.01	16.59	17.15	18.77
	6H	1.03	1.57	2.20	2.71	4.34	15.84	16.38	17.01	17.53	19.15
	8H	1.09	1.60	2.26	2.76	4.38	15.95	16.47	17.13	17.63	19.25
	12H	1.10	1.59	2.28	2.74	4.38	16.01	16.50	17.19	17.66	19.30
4H	2H	6.99	7.57	8.16	8.72	10.33	13.22	13.81	14.39	14.95	16.57
	3H	8.54	9.03	9.71	10.20	11.83	15.25	15.74	16.42	16.91	18.53
	4H	8.63	9.08	9.80	10.24	11.88	16.00	16.45	17.18	17.61	19.26
	6H	8.63	9.01	9.81	10.20	11.83	16.53	16.91	17.71	18.09	19.73
	8H	8.60	8.96	9.78	10.13	11.78	16.68	17.04	17.86	18.21	19.87
	12H	8.55	8.88	9.74	10.06	11.71	16.76	17.09	17.96	18.27	19.93
8H	4H	10.05	10.41	11.23	11.59	13.24	16.05	16.41	17.23	17.58	19.23
	6H	10.29	10.59	11.49	11.80	13.45	16.66	16.96	17.86	18.18	19.82
	8H	10.30	10.56	11.51	11.76	13.42	16.88	17.14	18.08	18.33	20.00
	12H	10.26	10.49	11.47	11.68	13.38	17.01	17.24	18.22	18.43	20.13
12H	4H	10.19	10.52	11.38	11.70	13.35	15.99	16.32	17.19	17.50	19.16
	6H	10.54	10.80	11.75	12.00	13.66	16.64	16.90	17.85	18.10	19.76
	8H	10.60	10.83	11.81	12.02	13.72	16.86	17.09	18.07	18.28	19.98