

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: P937851

Luminaire Tested: SQ4-FB-125U-050D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

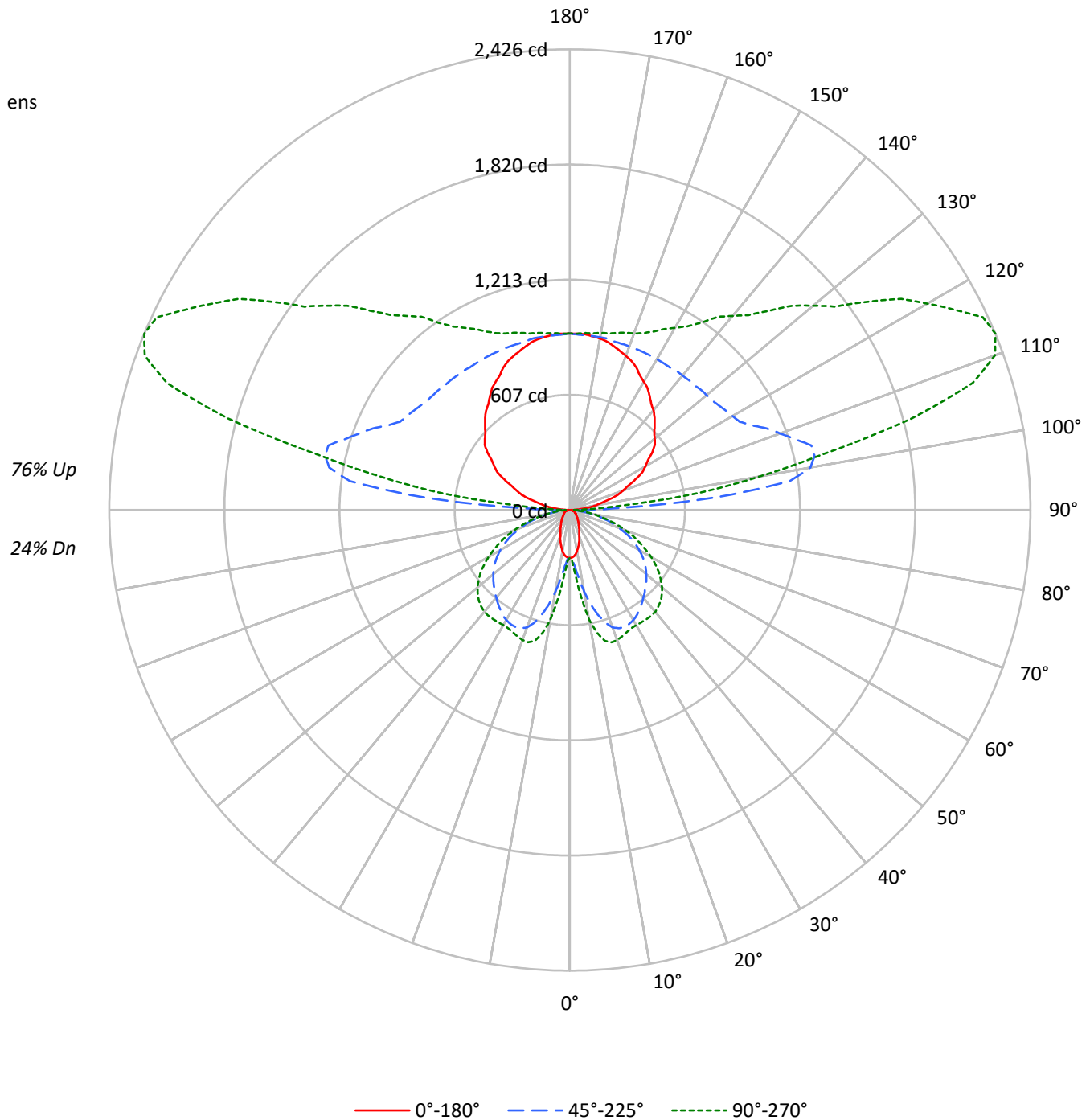
Test Method: LM-79-2019  
Report Number: P937851  
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7970.5 lumens  
Efficiency: N/A  
Efficacy: 111.6 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				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°	1554	1554	1554
5°	1518	1795	2089
10°	1376	2617	3462
15°	1169	3418	4181
20°	951	3960	4262
25°	794	4143	4175
30°	669	4168	4167
35°	591	4098	4275
40°	514	4007	4386
45°	466	3939	4403
50°	427	3879	4331
55°	409	3791	4139
60°	418	3623	3835
65°	434	3368	3418
70°	462	2935	2889
75°	509	2391	2254
80°	550	1656	1519
85°	483	878	777

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4403 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.5	0.4
10°-20°	144.0	1.8
20°-30°	251.9	3.2
30°-40°	324.3	4.1
40°-50°	362.2	4.5
50°-60°	346.9	4.4
60°-70°	274.9	3.4
70°-80°	161.7	2.0
80°-90°	48.5	0.6
90°-100°	452.9	5.7
100°-110°	1190.8	14.9
110°-120°	1234.8	15.5
120°-130°	990.4	12.4
130°-140°	777.1	9.7
140°-150°	596.5	7.5
150°-160°	429.6	5.4
160°-170°	262.8	3.3
170°-180°	88.8	1.1
0°-30°	428.4	5.4
0°-40°	752.7	9.4
0°-60°	1461.8	18.3
0°-90°	1946.8	24.4
90°-120°	2878.5	36.1
90°-150°	5242.5	65.8
90°-180°	6024.0	75.6
0°-180°	7970.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	251	251	251	251	251	
5°	245	262	296	334	346	23
15°	183	338	570	691	713	51
25°	117	384	679	709	710	54
35°	79	367	640	676	703	49
45°	54	292	565	648	677	42
55°	39	186	480	557	573	35
65°	31	98	356	401	406	30
75°	23	60	196	215	216	24
85°	8	18	48	53	54	9
90°	6	17	47	24	24	6
95°	60	234	780	402	274	66
105°	215	325	1316	1999	1865	227
115°	381	463	1055	2104	2401	376
125°	530	594	959	1621	1912	471
135°	632	695	929	1308	1484	489
145°	733	780	917	1116	1204	459
155°	828	851	917	1007	1036	381
165°	894	906	917	954	965	252
175°	929	929	924	936	936	88
180°	929	929	929	929	929	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2
2.5°	251.2	251.2	252.8	253.6	255.3	256.1	257.7	259.3	264.1	264.9	266.5
5°	244.8	248.0	258.5	262.5	273.8	289.2	295.6	306.1	327.9	334.4	338.5
7.5°	235.0	242.3	268.1	274.6	302.9	343.3	360.2	382.9	417.6	434.6	448.3
10°	219.7	235.0	281.0	296.5	342.5	403.8	435.4	466.9	519.4	542.7	551.7
12.5°	202.8	227.8	294.8	315.8	382.1	471.7	509.7	544.4	604.2	635.7	640.5
15°	183.3	217.3	307.7	338.5	424.1	528.2	570.2	613.1	668.8	691.4	697.1
17.5°	166.4	209.2	319.8	352.2	456.3	579.1	621.9	657.5	702.7	718.0	722.1
20°	145.4	196.3	327.9	369.9	490.3	616.3	657.5	685.0	715.6	725.3	727.0
22.5°	130.0	182.5	332.8	376.4	512.9	638.9	673.6	695.4	716.4	719.6	720.5
25°	117.2	167.2	332.0	383.7	532.3	652.6	679.3	695.4	707.5	709.1	709.1
27.5°	105.0	150.2	328.7	385.3	546.8	655.9	676.8	688.2	693.8	697.1	697.1
30°	94.5	134.1	320.6	382.1	553.3	652.6	669.6	675.2	680.9	685.8	688.2
32.5°	86.4	118.8	308.5	375.6	554.1	644.6	656.7	659.9	667.9	679.3	683.4
35°	79.2	103.4	294.8	366.7	549.3	631.6	639.7	643.0	659.1	676.0	681.7
37.5°	71.9	92.1	277.0	351.4	541.9	616.3	621.9	627.6	652.6	672.8	679.3
40°	64.6	82.4	256.1	334.4	530.7	597.7	602.6	611.4	644.6	667.9	674.4
42.5°	58.9	74.3	233.4	316.6	516.1	576.7	583.9	596.9	634.9	659.9	667.1
45°	54.1	66.2	209.2	292.4	497.5	554.9	565.4	583.1	623.5	647.8	654.2
47.5°	49.3	60.5	184.1	267.3	477.4	533.1	546.8	567.0	608.2	631.6	637.3
50°	45.2	54.9	159.2	240.7	455.5	509.7	525.8	546.8	588.8	610.6	617.9
52.5°	42.0	50.1	135.7	214.1	430.5	485.4	504.0	525.8	565.4	586.4	591.2
55°	38.8	46.0	115.5	185.7	404.6	459.6	479.8	500.8	539.5	557.3	560.6
57.5°	37.2	42.8	98.5	159.2	377.2	430.5	453.1	472.5	508.9	522.6	525.8
60°	34.8	40.4	85.6	136.5	347.3	403.0	422.5	441.8	472.5	483.8	486.2
62.5°	32.3	38.8	76.0	114.7	316.6	370.7	390.1	407.9	433.7	441.8	445.0
65°	30.7	37.2	68.7	98.5	285.1	336.8	356.2	371.5	392.5	400.6	402.2
67.5°	29.1	35.6	63.0	84.8	253.6	302.9	317.4	332.0	348.1	356.2	357.0
70°	26.7	33.9	58.1	75.1	221.3	264.1	276.2	291.6	304.5	308.5	311.0
72.5°	25.1	31.5	54.9	67.9	188.2	226.9	238.3	247.2	258.5	262.5	262.5
75°	22.6	28.3	51.7	60.5	154.3	185.7	195.5	204.4	213.2	214.9	212.4
77.5°	20.2	25.1	44.4	50.9	120.4	147.0	155.1	160.0	167.2	168.8	169.6
80°	16.9	21.8	34.8	39.6	87.2	108.2	113.9	118.0	124.4	124.4	126.0
82.5°	12.9	16.9	25.1	28.3	58.9	74.3	79.2	81.6	85.6	85.6	85.6
85°	8.1	10.5	16.1	18.5	35.6	45.2	48.5	49.3	52.5	53.3	53.3
87.5°	4.0	5.6	10.5	11.3	18.5	23.4	23.4	25.1	25.1	24.3	23.4
90°	6.3	11.2	16.2	17.4	27.4	40.7	47.4	42.1	31.6	23.7	23.7
92.5°	25.0	67.4	109.8	120.4	169.2	234.3	266.9	233.9	168.0	118.5	113.8
95°	59.9	137.5	215.0	234.5	416.4	658.9	780.2	696.2	528.2	402.2	387.9
97.5°	103.5	171.9	240.4	257.5	560.8	965.3	1167.5	1114.4	1008.2	928.6	901.4
100°	137.2	199.3	261.4	276.9	613.4	1062.2	1286.6	1290.4	1298.2	1304.0	1271.6
102.5°	165.9	223.8	281.8	296.2	637.6	1092.6	1320.2	1387.8	1523.1	1624.5	1596.8
105°	214.6	263.6	312.6	324.9	655.4	1096.2	1316.5	1468.1	1771.3	1998.7	1983.8
107.5°	264.4	310.1	355.9	367.3	658.8	1047.4	1241.7	1453.2	1876.1	2193.3	2196.9
110°	298.1	339.3	380.6	391.0	653.7	1004.1	1179.3	1415.7	1888.6	2243.3	2258.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	331.2	370.5	409.9	419.7	654.0	966.3	1122.5	1364.5	1848.4	2211.4	2235.2
115°	381.0	417.3	453.7	462.8	660.1	923.0	1054.6	1287.7	1753.9	2103.5	2136.6
117.5°	430.3	463.3	496.3	504.5	672.3	895.9	1007.8	1218.2	1638.9	1954.5	1991.1
120°	459.0	490.1	521.1	528.9	682.2	886.8	989.1	1181.3	1565.7	1854.0	1889.7
122.5°	487.1	518.4	549.7	557.5	696.6	882.0	974.8	1147.9	1494.1	1753.7	1788.8
125°	530.1	558.6	587.2	594.3	716.0	878.1	959.2	1106.2	1400.3	1620.9	1653.2
127.5°	565.0	593.8	622.6	629.9	735.3	875.8	946.1	1072.3	1324.9	1514.2	1541.5
130°	583.7	614.8	645.8	653.6	749.4	877.1	941.0	1053.5	1278.2	1446.8	1472.1
132.5°	603.1	634.1	665.1	672.9	760.8	878.1	936.7	1037.3	1238.5	1389.4	1412.0
135°	631.7	660.0	688.3	695.3	773.3	877.3	929.2	1013.5	1182.0	1308.4	1327.8
137.5°	661.0	689.1	717.1	724.1	792.0	882.7	927.9	999.2	1141.6	1248.5	1264.4
140°	685.4	711.1	736.9	743.3	803.4	883.5	923.6	985.1	1108.2	1200.5	1215.4
142.5°	704.1	727.9	751.8	757.7	813.0	886.8	923.6	977.7	1085.7	1166.8	1179.7
145°	732.7	753.5	774.3	779.6	825.5	886.8	917.3	961.6	1050.0	1116.3	1126.0
147.5°	761.5	781.7	802.0	807.0	843.8	892.9	917.3	952.1	1021.7	1073.9	1082.0
150°	780.2	798.5	816.7	821.3	853.3	896.0	917.3	946.7	1005.5	1049.6	1056.1
152.5°	799.5	813.4	827.3	830.7	859.6	898.1	917.3	942.4	992.6	1030.2	1035.1
155°	828.2	838.5	848.7	851.3	873.3	902.7	917.3	937.3	977.3	1007.2	1010.5
157.5°	849.4	859.4	869.3	871.8	887.0	907.2	917.3	932.8	963.9	987.2	989.5
160°	863.7	871.5	879.3	881.2	893.3	909.3	917.3	930.7	957.3	977.3	978.5
162.5°	878.1	883.9	889.7	891.2	899.9	911.6	917.3	928.6	951.0	967.9	969.1
165°	893.7	899.0	904.3	905.5	909.5	914.7	917.3	925.4	941.5	953.6	954.8
167.5°	908.0	910.5	913.0	913.7	916.9	921.4	923.6	928.9	939.4	947.3	947.9
170°	917.3	919.8	922.3	923.0	923.2	923.4	923.6	928.9	939.4	947.3	947.3
172.5°	922.3	922.9	923.4	923.6	923.6	923.6	923.6	927.8	936.1	942.3	941.8
175°	929.2	929.2	929.2	929.2	927.4	924.9	923.6	926.3	931.6	935.5	935.5
177.5°	929.2	929.2	929.2	929.2	927.8	925.8	924.8	926.9	931.1	934.2	933.6
180°	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	251.2	251.2
2.5°	268.1	266.5
5°	344.9	346.5
7.5°	464.5	463.7
10°	577.5	584.7
12.5°	659.9	661.5
15°	710.0	713.2
17.5°	729.4	730.2
20°	730.2	728.6
22.5°	721.3	719.6
25°	710.8	710.0
27.5°	701.1	701.9
30°	697.1	699.5
32.5°	697.1	701.1
35°	698.7	702.7
37.5°	697.9	702.7
40°	694.6	700.3
42.5°	685.8	689.8
45°	672.0	676.8
47.5°	654.2	657.5
50°	631.6	634.9
52.5°	603.4	604.2
55°	569.4	572.7
57.5°	533.1	533.9
60°	492.7	495.1
62.5°	449.9	449.9
65°	404.6	406.2
67.5°	357.8	361.8
70°	310.2	311.0
72.5°	263.3	263.3
75°	214.9	215.7
77.5°	168.8	168.8
80°	125.2	126.0
82.5°	86.4	88.0
85°	54.1	54.1
87.5°	25.1	22.6
90°	23.7	23.7
92.5°	94.9	76.0
95°	330.8	273.7
97.5°	792.8	684.2
100°	1142.3	1012.8
102.5°	1486.0	1375.1
105°	1924.2	1864.6
107.5°	2211.3	2225.8
110°	2320.8	2382.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2330.5	2425.9
115°	2268.8	2401.0
117.5°	2137.7	2284.4
120°	2032.2	2174.6
122.5°	1929.3	2069.8
125°	1782.7	1912.1
127.5°	1650.7	1759.9
130°	1573.0	1673.9
132.5°	1502.4	1592.8
135°	1405.7	1483.6
137.5°	1328.2	1391.9
140°	1275.0	1334.6
142.5°	1230.9	1282.2
145°	1164.8	1203.6
147.5°	1114.2	1146.3
150°	1082.2	1108.2
152.5°	1054.8	1074.5
155°	1023.5	1036.5
157.5°	998.6	1007.8
160°	983.8	989.1
162.5°	974.1	979.1
165°	960.1	965.4
167.5°	950.0	952.3
170°	947.3	947.3
172.5°	939.9	938.0
175°	935.5	935.5
177.5°	931.5	929.2
180°	929.2	929.2



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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	0.20	0.66	1.34	2.93	12.68	13.37	13.83	14.51	16.10
	3H	0.21	0.82	1.36	1.97	3.58	14.50	15.12	15.66	16.26	17.87
	4H	0.50	1.08	1.66	2.23	3.84	15.14	15.72	16.30	16.87	18.48
	6H	0.74	1.28	1.91	2.43	4.05	15.55	16.09	16.72	17.24	18.86
	8H	0.80	1.32	1.97	2.48	4.09	15.67	16.18	16.84	17.34	18.96
	12H	0.81	1.30	1.99	2.46	4.10	15.73	16.21	16.90	17.37	19.01
4H	2H	6.70	7.29	7.87	8.43	10.05	12.94	13.52	14.10	14.67	16.28
	3H	8.25	8.74	9.43	9.91	11.54	14.96	15.45	16.13	16.62	18.24
	4H	8.34	8.79	9.52	9.95	11.59	15.72	16.17	16.89	17.33	18.97
	6H	8.34	8.73	9.52	9.91	11.54	16.24	16.63	17.42	17.81	19.44
	8H	8.31	8.67	9.49	9.85	11.50	16.39	16.76	17.57	17.93	19.58
	12H	8.26	8.59	9.46	9.77	11.43	16.48	16.80	17.67	17.99	19.64
8H	4H	9.77	10.13	10.95	11.30	12.95	15.76	16.12	16.94	17.29	18.95
	6H	10.00	10.30	11.20	11.51	13.16	16.38	16.68	17.58	17.89	19.54
	8H	10.02	10.28	11.22	11.47	13.14	16.59	16.85	17.80	18.04	19.71
	12H	9.98	10.20	11.19	11.40	13.09	16.72	16.95	17.93	18.14	19.84
12H	4H	9.90	10.23	11.10	11.41	13.07	15.70	16.03	16.90	17.22	18.87
	6H	10.26	10.52	11.46	11.71	13.38	16.36	16.62	17.56	17.81	19.48
	8H	10.32	10.55	11.53	11.74	13.43	16.58	16.80	17.79	18.00	19.69