

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: P938398

Luminaire Tested: SQ4-FB-150U-075D-B35-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

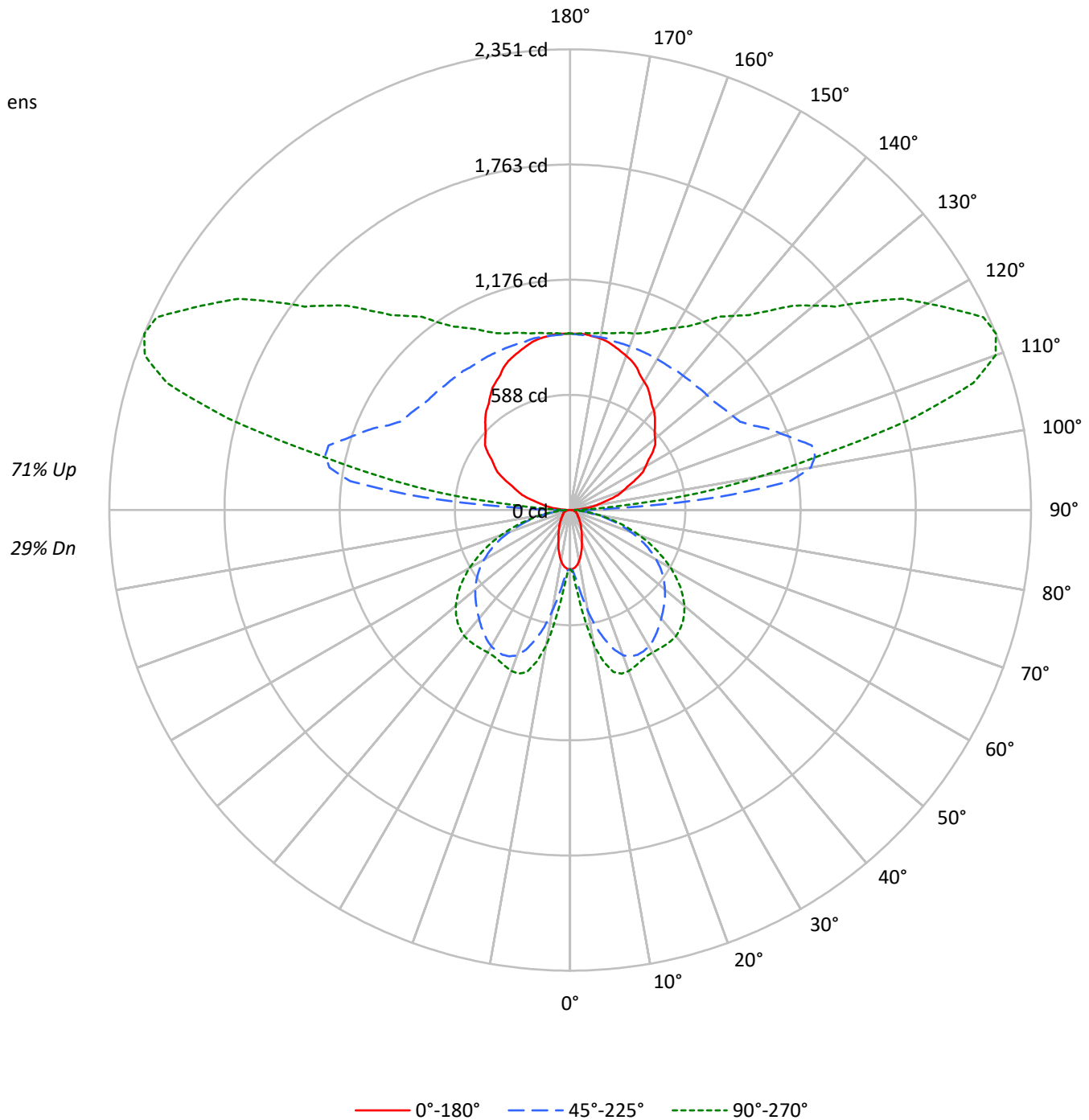
Test Method: LM-79-2019  
Report Number: P938398  
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-B35-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8172.5 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 63.6  
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23				23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19				19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16				16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13				13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11				11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10				10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8				8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7				7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6				6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6				6

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

	0°	45°	90°
0°	2797	2797	2797
5°	2729	3230	3759
10°	2473	4704	6232
15°	2099	6142	7524
20°	1707	7112	7668
25°	1422	7437	7513
30°	1198	7478	7499
35°	1058	7348	7692
40°	919	7181	7893
45°	831	7056	7923
50°	761	6943	7792
55°	726	6780	7447
60°	742	6473	6902
65°	767	6011	6152
70°	812	5232	5198
75°	889	4255	4056
80°	950	2940	2734
85°	803	1551	1398

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7923 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.0	0.5
10°-20°	172.8	2.1
20°-30°	302.2	3.7
30°-40°	389.0	4.8
40°-50°	434.5	5.3
50°-60°	416.2	5.1
60°-70°	329.8	4.0
70°-80°	193.9	2.4
80°-90°	57.3	0.7
90°-100°	439.0	5.4
100°-110°	1154.1	14.1
110°-120°	1196.6	14.6
120°-130°	959.8	11.7
130°-140°	753.1	9.2
140°-150°	578.1	7.1
150°-160°	416.3	5.1
160°-170°	254.7	3.1
170°-180°	86.1	1.1
0°-30°	514.0	6.3
0°-40°	903.0	11.0
0°-60°	1753.7	21.5
0°-90°	2334.8	28.6
90°-120°	2789.6	34.1
90°-150°	5080.6	62.2
90°-180°	5838.0	71.4
0°-180°	8172.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	301	301	301	301	301	
5°	294	315	355	401	416	27
15°	220	406	684	830	856	61
25°	140	460	815	851	852	65
35°	95	440	767	811	843	59
45°	65	351	678	777	812	50
55°	46	223	576	669	687	42
65°	37	118	427	481	487	37
75°	27	73	234	258	259	28
85°	10	22	58	64	65	10
90°	6	17	46	23	23	6
95°	58	227	756	390	265	64
105°	208	315	1276	1937	1807	220
115°	369	448	1022	2039	2327	365
125°	514	576	930	1571	1853	456
135°	612	674	900	1268	1438	474
145°	710	755	889	1082	1166	445
155°	803	825	889	976	1004	369
165°	866	878	889	924	936	244
175°	900	900	895	907	907	85
180°	900	900	900	900	900	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	301.4	301.4	301.4	301.4	301.4	301.4	301.4	301.4	301.4	301.4	301.4
2.5°	301.4	301.4	303.3	304.3	306.2	307.2	309.1	311.0	316.9	317.8	319.8
5°	293.6	297.5	310.1	314.9	328.5	346.9	354.7	367.3	393.4	401.2	406.0
7.5°	282.0	290.7	321.7	329.5	363.4	411.8	432.2	459.3	501.0	521.3	537.8
10°	263.6	282.0	337.2	355.6	410.9	484.5	522.3	560.1	623.1	651.2	661.8
12.5°	243.2	273.3	353.7	378.9	458.3	565.9	611.4	653.1	724.8	762.6	768.4
15°	220.0	260.7	369.2	406.0	508.7	633.7	684.1	735.5	802.3	829.5	836.2
17.5°	199.6	251.0	383.7	422.5	547.5	694.8	746.1	788.8	843.0	861.4	866.3
20°	174.4	235.5	393.4	443.8	588.2	739.3	788.8	821.7	858.5	870.2	872.1
22.5°	156.0	219.0	399.2	451.6	615.3	766.5	808.1	834.3	859.5	863.4	864.3
25°	140.5	200.6	398.3	460.3	638.6	783.0	814.9	834.3	848.8	850.8	850.8
27.5°	126.0	180.2	394.4	462.2	656.0	786.8	812.0	825.6	832.4	836.2	836.2
30°	113.4	160.9	384.7	458.3	663.8	783.0	803.3	810.1	816.9	822.7	825.6
32.5°	103.7	142.4	370.2	450.6	664.7	773.3	787.8	791.7	801.4	814.9	819.8
35°	95.0	124.0	353.7	439.9	658.9	757.8	767.4	771.3	790.7	811.1	817.8
37.5°	86.2	110.5	332.4	421.5	650.2	739.3	746.1	752.9	783.0	807.2	814.9
40°	77.5	98.8	307.2	401.2	636.6	717.1	722.9	733.5	773.3	801.4	809.1
42.5°	70.7	89.1	280.0	379.8	619.2	691.9	700.6	716.1	761.6	791.7	800.4
45°	64.9	79.5	251.0	350.8	596.9	665.7	678.3	699.6	748.1	777.1	784.9
47.5°	59.1	72.7	220.9	320.7	572.7	639.5	656.0	680.2	729.7	757.8	764.5
50°	54.3	65.9	190.9	288.8	546.5	611.4	630.8	656.0	706.4	732.6	741.3
52.5°	50.4	60.1	162.8	256.8	516.5	582.4	604.7	630.8	678.3	703.5	709.3
55°	46.5	55.2	138.6	222.9	485.5	551.4	575.6	600.8	647.3	668.6	672.5
57.5°	44.6	51.4	118.2	190.9	452.5	516.5	543.6	566.9	610.5	626.9	630.8
60°	41.7	48.4	102.7	163.8	416.7	483.5	506.8	530.0	566.9	580.4	583.3
62.5°	38.8	46.5	91.1	137.6	379.8	444.8	468.0	489.3	520.4	530.0	533.9
65°	36.8	44.6	82.4	118.2	342.1	404.1	427.3	445.7	470.9	480.6	482.6
67.5°	34.9	42.6	75.6	101.7	304.3	363.4	380.8	398.3	417.6	427.3	428.3
70°	32.0	40.7	69.8	90.1	265.5	316.9	331.4	349.8	365.3	370.2	373.1
72.5°	30.0	37.8	65.9	81.4	225.8	272.3	285.9	296.5	310.1	314.9	314.9
75°	27.1	33.9	62.0	72.7	185.1	222.9	234.5	245.2	255.8	257.8	254.8
77.5°	24.2	30.0	53.3	61.0	144.4	176.4	186.0	191.9	200.6	202.5	203.5
80°	20.3	26.2	41.7	47.5	104.7	129.8	136.6	141.5	149.2	149.2	151.2
82.5°	15.5	20.3	30.0	33.9	70.7	89.1	95.0	97.9	102.7	102.7	102.7
85°	9.7	12.6	19.4	22.3	42.6	54.3	58.1	59.1	63.0	64.0	64.0
87.5°	4.8	6.8	12.6	13.6	22.3	28.1	28.1	30.0	30.0	29.1	28.1
90°	6.0	10.9	15.7	17.0	26.6	39.5	45.9	40.8	30.6	23.0	23.0
92.5°	24.1	65.2	106.4	116.7	164.0	227.0	258.6	226.6	162.8	114.8	110.3
95°	58.0	133.2	208.4	227.2	403.5	638.6	756.1	674.7	511.9	389.8	376.0
97.5°	100.3	166.7	233.0	249.6	543.5	935.5	1131.4	1080.0	977.0	899.9	873.6
100°	132.9	193.1	253.3	268.3	594.5	1029.4	1246.8	1250.6	1258.1	1263.8	1232.4
102.5°	160.8	217.0	273.1	287.1	617.9	1058.9	1279.5	1345.0	1476.1	1574.4	1547.6
105°	207.9	255.5	303.0	314.9	635.2	1062.2	1275.8	1422.7	1716.6	1937.0	1922.6
107.5°	256.3	300.6	345.0	356.0	638.5	1015.0	1203.3	1408.2	1818.1	2125.6	2129.1
110°	288.9	328.9	369.0	379.0	633.6	973.1	1142.8	1372.0	1830.2	2174.0	2189.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	320.9	359.1	397.3	406.8	633.8	936.5	1087.9	1322.4	1791.4	2143.1	2166.2
115°	369.3	404.5	439.6	448.5	639.6	894.6	1022.0	1247.9	1699.7	2038.6	2070.7
117.5°	417.1	449.0	481.0	489.0	651.6	868.3	976.7	1180.5	1588.3	1894.1	1929.7
120°	444.8	474.9	504.9	512.5	661.1	859.4	958.5	1144.8	1517.4	1796.8	1831.3
122.5°	472.0	502.3	532.8	540.3	675.1	854.9	944.7	1112.4	1447.9	1699.5	1733.5
125°	513.8	541.4	569.1	576.0	693.8	851.0	929.6	1072.0	1357.0	1570.7	1602.1
127.5°	547.6	575.5	603.4	610.4	712.5	848.7	916.9	1039.3	1283.9	1467.5	1493.9
130°	565.7	595.7	625.8	633.3	726.3	850.1	912.0	1020.9	1238.8	1402.1	1426.6
132.5°	584.4	614.5	644.6	652.1	737.3	851.0	907.8	1005.2	1200.3	1346.5	1368.4
135°	612.2	639.6	667.0	673.8	749.4	850.1	900.5	982.2	1145.5	1267.9	1286.8
137.5°	640.6	667.7	694.9	701.7	767.5	855.4	899.3	968.3	1106.4	1210.0	1225.4
140°	664.2	689.2	714.2	720.5	778.7	856.3	895.1	954.7	1073.9	1163.4	1177.8
142.5°	682.4	705.4	728.5	734.3	787.9	859.3	895.1	947.5	1052.2	1130.8	1143.2
145°	710.2	730.3	750.4	755.4	800.0	859.4	889.1	931.9	1017.5	1081.8	1091.2
147.5°	737.9	757.6	777.1	782.1	817.7	865.3	889.1	922.8	990.1	1040.7	1048.5
150°	756.1	773.8	791.5	795.9	826.9	868.3	889.1	917.5	974.4	1017.2	1023.5
152.5°	774.8	788.3	801.7	805.0	833.0	870.4	889.1	913.4	962.0	998.5	1003.2
155°	802.6	812.6	822.5	825.0	846.3	874.8	889.1	908.4	947.1	976.1	979.3
157.5°	823.2	832.9	842.4	844.9	859.6	879.3	889.1	904.1	934.1	956.7	958.9
160°	837.0	844.6	852.1	854.0	865.7	881.3	889.1	901.9	927.7	947.0	948.3
162.5°	851.0	856.6	862.2	863.7	872.1	883.4	889.1	899.9	921.7	938.0	939.2
165°	866.1	871.1	876.3	877.5	881.4	886.5	889.1	896.8	912.4	924.0	925.3
167.5°	879.9	882.4	884.8	885.4	888.6	892.9	895.1	900.2	910.4	918.0	918.6
170°	889.1	891.5	893.9	894.5	894.7	895.0	895.1	900.2	910.4	918.0	918.0
172.5°	893.9	894.4	895.0	895.1	895.1	895.1	895.1	899.1	907.2	913.2	912.7
175°	900.5	900.5	900.5	900.5	898.7	896.2	895.1	897.6	902.7	906.6	906.6
177.5°	900.5	900.5	900.5	900.5	899.1	897.3	896.3	898.4	902.3	905.3	904.8
180°	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	301.4	301.4
2.5°	321.7	319.8
5°	413.8	415.7
7.5°	557.2	556.2
10°	692.8	701.6
12.5°	791.7	793.6
15°	851.8	855.6
17.5°	875.0	876.0
20°	876.0	874.0
22.5°	865.3	863.4
25°	852.7	851.8
27.5°	841.1	842.1
30°	836.2	839.2
32.5°	836.2	841.1
35°	838.2	843.0
37.5°	837.2	843.0
40°	833.3	840.1
42.5°	822.7	827.5
45°	806.2	812.0
47.5°	784.9	788.8
50°	757.8	761.6
52.5°	723.8	724.8
55°	683.1	687.0
57.5°	639.5	640.5
60°	591.1	594.0
62.5°	539.7	539.7
65°	485.5	487.4
67.5°	429.3	434.1
70°	372.1	373.1
72.5°	315.9	315.9
75°	257.8	258.7
77.5°	202.5	202.5
80°	150.2	151.2
82.5°	103.7	105.6
85°	64.9	64.9
87.5°	30.0	27.1
90°	23.0	23.0
92.5°	92.0	73.7
95°	320.6	265.3
97.5°	768.3	663.0
100°	1107.0	981.5
102.5°	1440.1	1332.7
105°	1864.8	1807.1
107.5°	2143.0	2157.0
110°	2249.1	2309.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2258.6	2351.0
115°	2198.8	2326.9
117.5°	2071.7	2213.8
120°	1969.4	2107.5
122.5°	1869.8	2005.9
125°	1727.5	1853.0
127.5°	1599.7	1705.5
130°	1524.3	1622.1
132.5°	1455.9	1543.5
135°	1362.3	1437.8
137.5°	1287.2	1348.9
140°	1235.6	1293.3
142.5°	1192.9	1242.5
145°	1128.9	1166.5
147.5°	1079.7	1110.9
150°	1048.7	1073.9
152.5°	1022.3	1041.3
155°	991.9	1004.5
157.5°	967.7	976.7
160°	953.4	958.5
162.5°	944.0	948.8
165°	930.4	935.6
167.5°	920.7	922.9
170°	918.0	918.0
172.5°	910.9	909.0
175°	906.6	906.6
177.5°	902.6	900.5
180°	900.5	900.5



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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	2.17	2.89	3.29	4.00	5.55	15.31	16.03	16.43	17.14	18.69
	3H	2.87	3.51	3.99	4.63	6.19	17.13	17.77	18.25	18.89	20.45
	4H	3.16	3.77	4.29	4.89	6.46	17.75	18.36	18.89	19.49	21.05
	6H	3.40	3.96	4.55	5.09	6.67	18.16	18.73	19.31	19.85	21.43
	8H	3.47	4.00	4.61	5.14	6.71	18.27	18.81	19.42	19.95	21.52
	12H	3.48	3.99	4.63	5.12	6.72	18.33	18.84	19.48	19.97	21.57
4H	2H	9.35	9.96	10.49	11.08	12.65	15.57	16.18	16.71	17.30	18.87
	3H	10.90	11.41	12.05	12.56	14.14	17.59	18.10	18.74	19.25	20.83
	4H	10.99	11.46	12.14	12.60	14.20	18.34	18.81	19.49	19.95	21.54
	6H	10.99	11.40	12.15	12.56	14.15	18.86	19.26	20.01	20.42	22.01
	8H	10.97	11.34	12.12	12.50	14.10	19.01	19.38	20.16	20.54	22.14
	12H	10.92	11.26	12.09	12.42	14.03	19.09	19.43	20.26	20.59	22.20
8H	4H	12.41	12.79	13.57	13.94	15.55	18.39	18.76	19.54	19.92	21.52
	6H	12.65	12.96	13.83	14.15	15.76	19.00	19.31	20.17	20.50	22.10
	8H	12.67	12.94	13.85	14.11	15.73	19.21	19.48	20.39	20.65	22.27
	12H	12.63	12.87	13.81	14.04	15.69	19.34	19.57	20.52	20.74	22.40
12H	4H	12.55	12.89	13.72	14.05	15.66	18.33	18.67	19.51	19.84	21.45
	6H	12.90	13.17	14.08	14.35	15.97	18.98	19.25	20.16	20.42	22.05
	8H	12.96	13.20	14.15	14.37	16.03	19.19	19.43	20.38	20.60	22.26