

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: P937048

Luminaire Tested: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937048
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

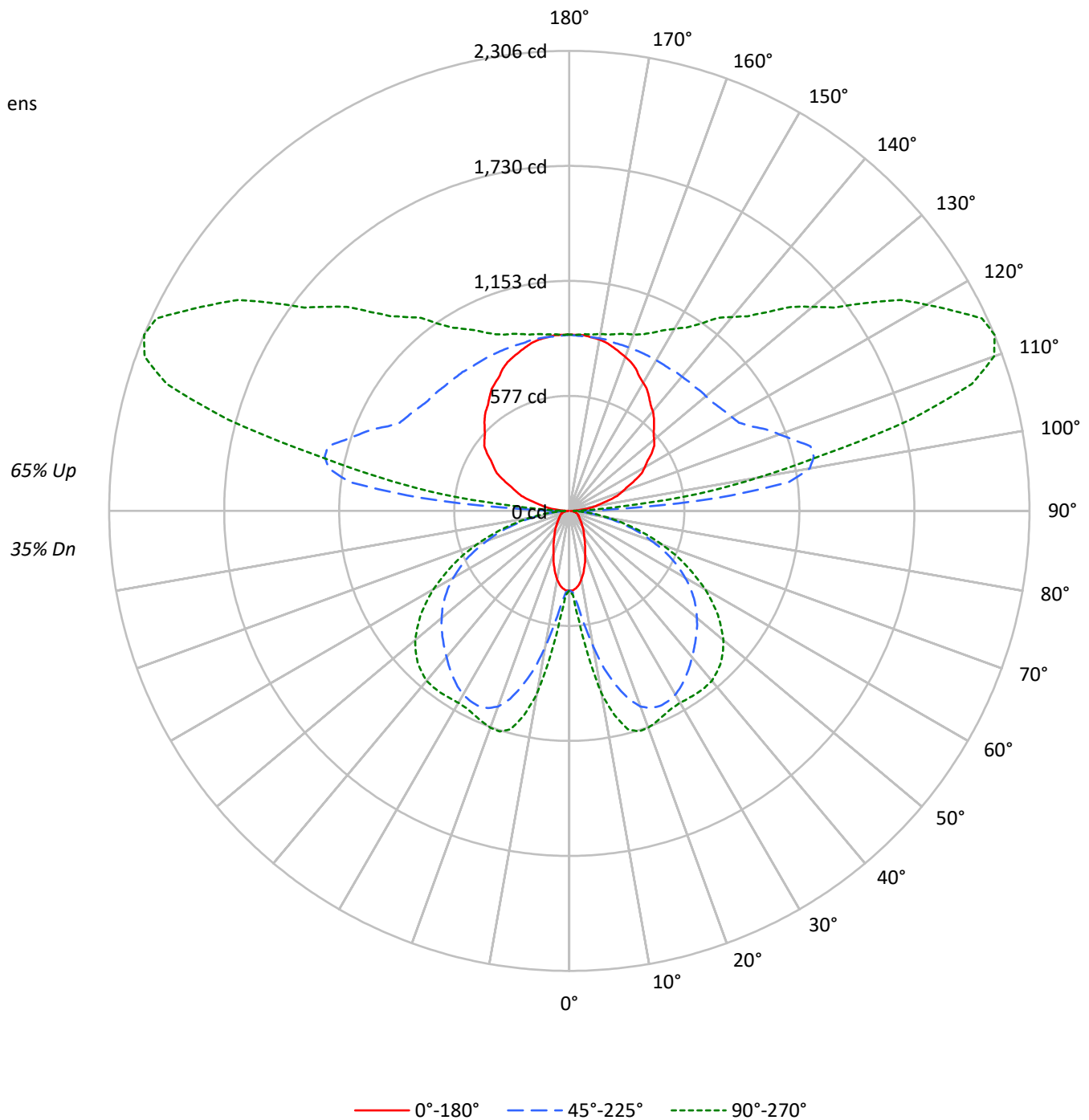
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8815.2 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 68.8
Input Voltage (V): NR
Input Current (Ain): 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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35			35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29			29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23			23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19			19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16			16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14			14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12			12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10			10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9			9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7			7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1850	1850	1850
5°	1808	2139	2487
10°	1640	3118	4124
15°	1394	4074	4980
20°	1134	4721	5075
25°	947	4940	4972
30°	798	4971	4962
35°	705	4889	5091
40°	615	4781	5224
45°	557	4703	5244
50°	511	4632	5157
55°	490	4528	4928
60°	501	4330	4567
65°	522	4027	4071
70°	556	3512	3440
75°	617	2864	2684
80°	674	1986	1808
85°	596	1054	926

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5244 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	0.6
10°-20°	228.7	2.6
20°-30°	400.0	4.5
30°-40°	514.9	5.8
40°-50°	575.1	6.5
50°-60°	550.8	6.2
60°-70°	436.5	5.0
70°-80°	256.7	2.9
80°-90°	74.7	0.8
90°-100°	430.6	4.9
100°-110°	1132.0	12.8
110°-120°	1173.7	13.3
120°-130°	941.5	10.7
130°-140°	738.7	8.4
140°-150°	567.0	6.4
150°-160°	408.3	4.6
160°-170°	249.8	2.8
170°-180°	84.4	1.0
0°-30°	680.2	7.7
0°-40°	1195.1	13.6
0°-60°	2321.1	26.3
0°-90°	3089.0	35.0
90°-120°	2736.3	31.0
90°-150°	4983.6	56.5
90°-180°	5726.0	65.0
0°-180°	8815.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	399	399	399	399	399	
5°	389	417	469	531	550	36
15°	291	537	906	1098	1132	81
25°	186	609	1079	1126	1127	86
35°	126	582	1016	1074	1116	78
45°	86	464	898	1029	1075	66
55°	62	295	762	885	909	56
65°	49	156	566	636	645	48
75°	36	96	310	341	342	38
85°	13	30	77	85	86	14
90°	6	17	45	23	23	6
95°	57	223	742	382	260	63
105°	204	309	1252	1900	1772	216
115°	362	440	1002	2000	2282	358
125°	504	565	912	1541	1818	447
135°	600	661	883	1244	1410	465
145°	697	741	872	1061	1144	436
155°	787	809	872	957	985	362
165°	850	861	872	906	918	240
175°	883	883	878	889	889	84
180°	883	883	883	883	883	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8
2.5°	398.8	398.8	401.4	402.7	405.2	406.6	409.2	411.7	419.4	420.6	423.2
5°	388.6	393.8	410.4	416.8	434.8	459.2	469.4	486.0	520.7	531.0	537.4
7.5°	373.2	384.8	425.8	436.0	481.0	545.0	572.0	607.9	663.0	690.0	711.8
10°	348.8	373.2	446.4	470.7	543.8	641.2	691.3	741.3	824.6	861.8	876.0
12.5°	322.0	361.6	468.2	501.4	606.6	749.0	809.3	864.4	959.3	1009.4	1017.0
15°	291.2	345.0	488.6	537.4	673.4	838.8	905.5	973.4	1061.9	1097.8	1106.8
17.5°	264.2	332.2	507.9	559.2	724.6	919.6	987.6	1044.0	1115.8	1140.2	1146.6
20°	230.8	311.6	520.7	587.4	778.5	978.6	1044.0	1087.6	1136.3	1151.7	1154.3
22.5°	206.4	289.8	528.4	597.6	814.4	1014.5	1069.6	1104.3	1137.6	1142.7	1144.0
25°	186.0	265.4	527.1	609.2	845.2	1036.3	1078.6	1104.3	1123.5	1126.1	1126.1
27.5°	166.8	238.6	522.0	611.8	868.3	1041.4	1074.8	1092.7	1101.7	1106.8	1106.8
30°	150.0	212.9	509.2	606.6	878.6	1036.3	1063.2	1072.2	1081.2	1088.9	1092.7
32.5°	137.2	188.6	490.0	596.4	879.8	1023.4	1042.7	1047.8	1060.6	1078.6	1085.0
35°	125.6	164.2	468.2	582.2	872.1	1003.0	1015.8	1020.9	1046.6	1073.5	1082.4
37.5°	114.2	146.2	439.9	557.9	860.6	978.6	987.6	996.5	1036.3	1068.4	1078.6
40°	102.6	130.8	406.6	531.0	842.6	949.1	956.8	970.9	1023.4	1060.6	1070.9
42.5°	93.6	118.0	370.6	502.8	819.6	915.7	927.3	947.8	1008.1	1047.8	1059.4
45°	86.0	105.2	332.2	464.2	790.0	881.1	897.8	926.0	990.1	1028.6	1038.8
47.5°	78.2	96.2	292.4	424.5	758.0	846.5	868.3	900.4	965.8	1003.0	1011.9
50°	71.8	87.2	252.6	382.2	723.4	809.3	834.9	868.3	935.0	969.6	981.1
52.5°	66.6	79.6	215.4	339.8	683.6	770.8	800.3	834.9	897.8	931.1	938.8
55°	61.6	73.1	183.4	295.0	642.6	729.8	761.8	795.2	856.7	885.0	890.1
57.5°	59.0	68.0	156.4	252.6	599.0	683.6	719.5	750.3	808.0	829.8	834.9
60°	55.2	64.2	136.0	216.8	551.5	640.0	670.8	701.6	750.3	768.2	772.1
62.5°	51.3	61.6	120.6	182.2	502.8	588.7	619.4	647.7	688.7	701.6	706.7
65°	48.8	59.0	109.0	156.4	452.8	534.8	565.6	590.0	623.3	636.2	638.7
67.5°	46.2	56.4	100.0	134.6	402.7	481.0	504.0	527.1	552.8	565.6	566.8
70°	42.4	53.8	92.4	119.2	351.4	419.4	438.6	463.0	483.5	490.0	493.8
72.5°	39.8	50.0	87.2	107.8	298.8	360.4	378.4	392.4	410.4	416.8	416.8
75°	36.0	44.8	82.0	96.2	245.0	295.0	310.4	324.4	338.6	341.2	337.3
77.5°	32.0	39.8	70.6	80.8	191.1	233.4	246.2	254.0	265.4	268.0	269.4
80°	27.0	34.6	55.2	62.8	138.6	171.8	180.8	187.2	197.5	197.5	200.0
82.5°	20.6	27.0	39.8	44.8	93.6	118.0	125.6	129.6	136.0	136.0	136.0
85°	12.8	16.6	25.6	29.5	56.4	71.8	77.0	78.2	83.4	84.6	84.6
87.5°	6.4	9.0	16.6	18.0	29.5	37.2	37.2	39.8	39.8	38.4	37.2
90°	5.9	10.7	15.5	16.6	26.1	38.7	45.0	40.1	30.0	22.6	22.6
92.5°	23.7	64.1	104.4	114.5	160.9	222.8	253.8	222.4	159.7	112.6	108.1
95°	56.9	130.7	204.4	222.9	395.8	626.3	741.6	661.8	502.1	382.4	368.8
97.5°	98.4	163.5	228.6	244.9	533.2	917.6	1109.8	1059.3	958.4	882.8	856.9
100°	130.4	189.4	248.5	263.2	583.2	1009.7	1223.0	1226.7	1234.1	1239.6	1208.8
102.5°	157.7	212.8	267.8	281.6	606.0	1038.7	1255.0	1319.3	1447.9	1544.3	1518.0
105°	204.0	250.6	297.2	308.9	623.1	1042.0	1251.5	1395.6	1683.8	1900.0	1885.8
107.5°	251.4	294.9	338.3	349.2	626.2	995.6	1180.3	1381.3	1783.4	2085.0	2088.4
110°	283.4	322.6	361.8	371.7	621.4	954.5	1121.0	1345.7	1795.3	2132.4	2147.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	314.8	352.2	389.6	398.9	621.6	918.6	1067.1	1297.2	1757.2	2102.2	2124.9
115°	362.2	396.7	431.2	439.8	627.4	877.4	1002.5	1224.0	1667.2	1999.6	2031.0
117.5°	409.1	440.4	471.8	479.6	639.1	851.7	958.0	1157.9	1557.9	1857.9	1892.7
120°	436.3	465.8	495.3	502.7	648.5	843.0	940.2	1123.0	1488.4	1762.5	1796.3
122.5°	463.0	492.8	522.6	530.0	662.2	838.4	926.6	1091.1	1420.2	1667.0	1700.4
125°	503.9	531.1	558.1	564.9	680.5	834.7	911.7	1051.5	1331.0	1540.7	1571.5
127.5°	537.1	564.5	591.9	598.8	699.0	832.6	899.3	1019.3	1259.3	1439.4	1465.3
130°	554.9	584.3	613.9	621.2	712.4	833.9	894.6	1001.4	1215.1	1375.4	1399.4
132.5°	573.2	602.8	632.3	639.7	723.3	834.7	890.4	986.0	1177.4	1320.8	1342.3
135°	600.5	627.4	654.3	661.0	735.1	833.9	883.3	963.5	1123.6	1243.7	1262.3
137.5°	628.4	655.0	681.6	688.3	752.9	839.1	882.1	949.8	1085.3	1186.8	1201.9
140°	651.5	676.0	700.5	706.6	763.7	839.9	878.0	936.5	1053.4	1141.2	1155.4
142.5°	669.3	692.0	714.7	720.3	772.9	843.0	878.0	929.3	1032.1	1109.2	1121.3
145°	696.6	716.4	736.1	741.0	784.7	843.0	872.0	914.1	998.2	1061.2	1070.4
147.5°	723.8	743.1	762.4	767.2	802.2	848.7	872.0	905.1	971.2	1020.8	1028.5
150°	741.6	759.0	776.4	780.7	811.1	851.8	872.0	900.0	955.8	997.7	1003.9
152.5°	760.0	773.2	786.4	789.6	817.1	853.7	872.0	895.9	943.6	979.3	984.0
155°	787.2	797.0	806.7	809.2	830.2	858.1	872.0	891.0	928.9	957.4	960.5
157.5°	807.4	816.9	826.3	828.7	843.2	862.4	872.0	886.8	916.3	938.4	940.6
160°	821.1	828.4	835.8	837.6	849.1	864.4	872.0	884.7	910.0	928.9	930.2
162.5°	834.7	840.2	845.8	847.2	855.5	866.5	872.0	882.8	904.1	920.0	921.2
165°	849.5	854.5	859.5	860.8	864.5	869.6	872.0	879.7	895.0	906.5	907.7
167.5°	863.2	865.5	867.9	868.5	871.7	875.9	878.0	882.9	893.0	900.5	901.0
170°	872.0	874.4	876.8	877.4	877.6	877.9	878.0	882.9	893.0	900.5	900.5
172.5°	876.8	877.3	877.9	878.0	878.0	878.0	878.0	881.9	889.8	895.8	895.3
175°	883.3	883.3	883.3	883.3	881.5	879.1	878.0	880.5	885.5	889.3	889.3
177.5°	883.3	883.3	883.3	883.3	881.9	880.1	879.1	881.1	885.1	888.0	887.5
180°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.8	398.8
2.5°	425.8	423.2
5°	547.6	550.2
7.5°	737.4	736.2
10°	917.0	928.6
12.5°	1047.8	1050.4
15°	1127.4	1132.5
17.5°	1158.1	1159.4
20°	1159.4	1156.8
22.5°	1145.3	1142.7
25°	1128.6	1127.4
27.5°	1113.2	1114.5
30°	1106.8	1110.7
32.5°	1106.8	1113.2
35°	1109.4	1115.8
37.5°	1108.1	1115.8
40°	1103.0	1112.0
42.5°	1088.9	1095.3
45°	1067.1	1074.8
47.5°	1038.8	1044.0
50°	1003.0	1008.1
52.5°	958.0	959.3
55°	904.2	909.3
57.5°	846.5	847.8
60°	782.4	786.2
62.5°	714.4	714.4
65°	642.6	645.1
67.5°	568.2	574.6
70°	492.5	493.8
72.5°	418.1	418.1
75°	341.2	342.4
77.5°	268.0	268.0
80°	198.8	200.0
82.5°	137.2	139.8
85°	86.0	86.0
87.5°	39.8	36.0
90°	22.6	22.6
92.5°	90.3	72.3
95°	314.6	260.3
97.5°	753.6	650.3
100°	1085.9	962.8
102.5°	1412.6	1307.2
105°	1829.1	1772.5
107.5°	2102.1	2115.8
110°	2206.2	2265.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2215.4	2306.1
115°	2156.7	2282.3
117.5°	2032.1	2171.5
120°	1931.8	2067.2
122.5°	1834.0	1967.6
125°	1694.6	1817.6
127.5°	1569.1	1673.0
130°	1495.2	1591.1
132.5°	1428.2	1514.0
135°	1336.3	1410.3
137.5°	1262.6	1323.2
140°	1212.1	1268.7
142.5°	1170.1	1218.9
145°	1107.3	1144.2
147.5°	1059.0	1089.6
150°	1028.7	1053.4
152.5°	1002.7	1021.4
155°	972.9	985.3
157.5°	949.3	958.0
160°	935.3	940.2
162.5°	926.0	930.8
165°	912.7	917.7
167.5°	903.1	905.2
170°	900.5	900.5
172.5°	893.5	891.6
175°	889.3	889.3
177.5°	885.4	883.3
180°	883.3	883.3



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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	1.59	2.36	2.66	3.43	4.90	14.77	15.54	15.84	16.61	18.08
	3H	2.29	2.98	3.37	4.06	5.54	16.60	17.29	17.68	18.37	19.86
	4H	2.58	3.23	3.67	4.32	5.81	17.24	17.90	18.33	18.98	20.47
	6H	2.83	3.43	3.93	4.52	6.02	17.67	18.27	18.77	19.36	20.86
	8H	2.89	3.47	4.00	4.57	6.07	17.79	18.36	18.89	19.46	20.96
	12H	2.91	3.45	4.02	4.55	6.07	17.85	18.40	18.96	19.50	21.02
4H	2H	8.80	9.45	9.89	10.53	12.03	15.03	15.69	16.13	16.77	18.26
	3H	10.35	10.90	11.46	12.01	13.52	17.07	17.62	18.17	18.73	20.23
	4H	10.45	10.95	11.55	12.05	13.57	17.83	18.34	18.94	19.44	20.96
	6H	10.45	10.88	11.57	12.01	13.52	18.37	18.80	19.48	19.92	21.44
	8H	10.42	10.83	11.54	11.94	13.48	18.53	18.93	19.64	20.05	21.58
	12H	10.38	10.74	11.51	11.87	13.41	18.61	18.98	19.75	20.11	21.65
8H	4H	11.88	12.28	13.00	13.40	14.94	17.89	18.29	19.00	19.41	20.94
	6H	12.12	12.45	13.26	13.61	15.14	18.51	18.84	19.65	20.00	21.53
	8H	12.14	12.43	13.28	13.57	15.12	18.73	19.02	19.87	20.16	21.71
	12H	12.10	12.36	13.25	13.49	15.08	18.87	19.13	20.02	20.26	21.85
12H	4H	12.02	12.39	13.15	13.51	15.05	17.83	18.20	18.97	19.33	20.87
	6H	12.38	12.67	13.52	13.81	15.36	18.49	18.78	19.64	19.92	21.47
	8H	12.44	12.70	13.59	13.83	15.42	18.72	18.97	19.87	20.11	21.70