

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: P938385

Luminaire Tested: SQ4-FB-150U-075D-B2750-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938385  
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-B2750-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

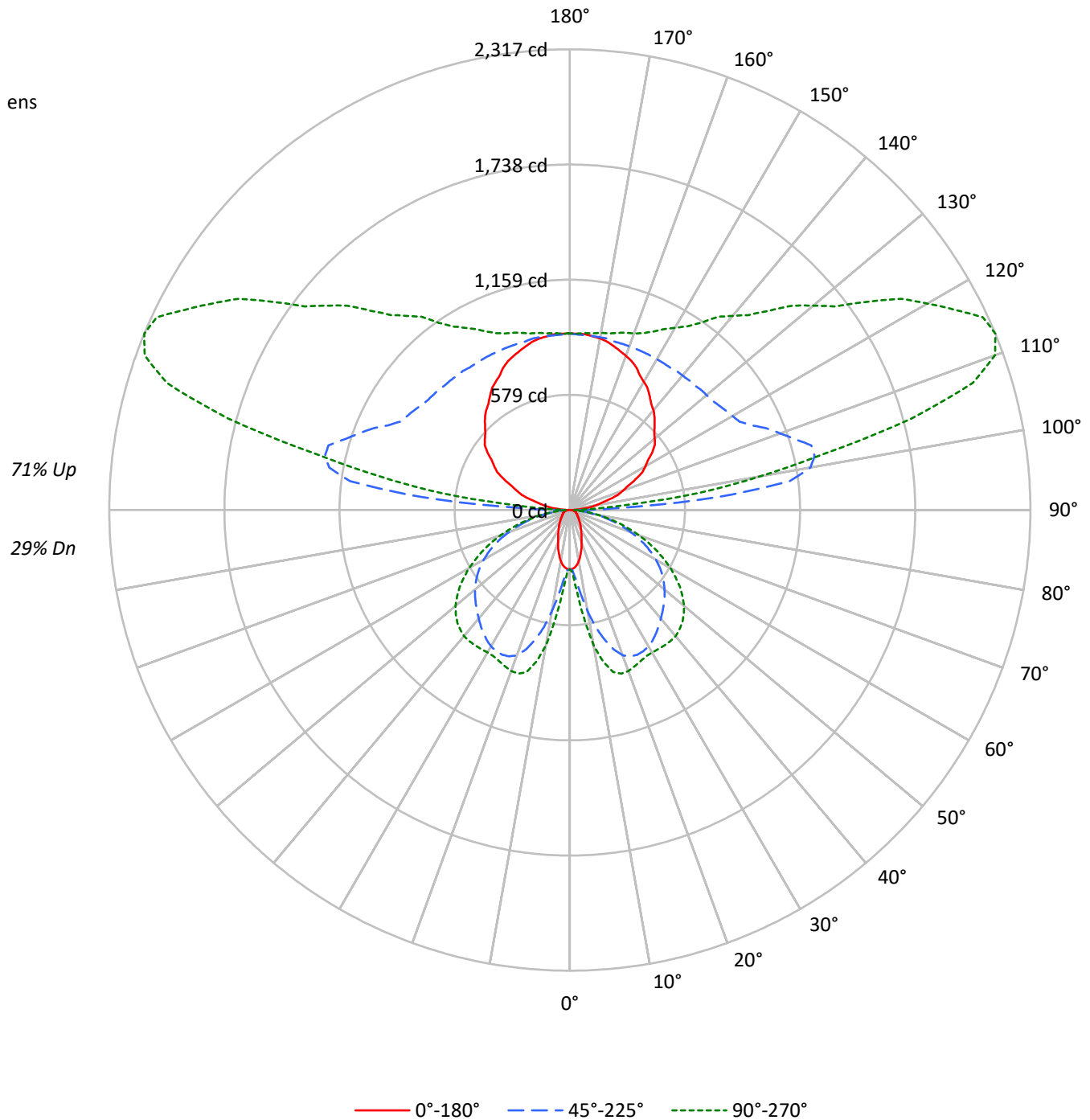
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8054.4 lumens  
Efficiency: N/A  
Efficacy: 126.6 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

TEST NUMBER: P938385  
CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-STD-W-4-4000K

### 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	27	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	21	19	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	13	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	12	9	8	6

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

	0°	45°	90°
0°	2756	2756	2756
5°	2690	3183	3704
10°	2437	4636	6141
15°	2069	6053	7416
20°	1682	7009	7558
25°	1402	7330	7404
30°	1180	7370	7390
35°	1042	7242	7581
40°	906	7077	7779
45°	819	6954	7809
50°	750	6842	7680
55°	715	6682	7340
60°	731	6380	6802
65°	756	5925	6064
70°	800	5156	5123
75°	876	4193	3998
80°	941	2899	2694
85°	787	1529	1379

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7809 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	0.5
10°-20°	170.3	2.1
20°-30°	297.8	3.7
30°-40°	383.4	4.8
40°-50°	428.2	5.3
50°-60°	410.2	5.1
60°-70°	325.1	4.0
70°-80°	191.1	2.4
80°-90°	56.5	0.7
90°-100°	432.6	5.4
100°-110°	1137.4	14.1
110°-120°	1179.3	14.6
120°-130°	946.0	11.7
130°-140°	742.2	9.2
140°-150°	569.7	7.1
150°-160°	410.3	5.1
160°-170°	251.0	3.1
170°-180°	84.8	1.1
0°-30°	506.5	6.3
0°-40°	889.9	11.0
0°-60°	1728.3	21.5
0°-90°	2301.0	28.6
90°-120°	2749.3	34.1
90°-150°	5007.2	62.2
90°-180°	5753.0	71.4
0°-180°	8054.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	289	310	350	395	410	27
15°	217	400	674	818	843	60
25°	138	454	803	838	839	64
35°	94	434	756	799	831	58
45°	64	346	668	766	800	50
55°	46	220	567	659	677	42
65°	36	116	421	474	480	36
75°	27	72	231	254	255	28
85°	10	22	57	63	64	10
90°	6	17	45	23	23	6
95°	57	224	745	384	262	63
105°	205	310	1257	1909	1781	217
115°	364	442	1007	2009	2293	359
125°	506	568	916	1548	1826	449
135°	603	664	888	1250	1417	467
145°	700	744	876	1066	1150	438
155°	791	813	876	962	990	363
165°	854	865	876	911	922	241
175°	888	888	882	894	894	84
180°	888	888	888	888	888	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0
2.5°	297.0	297.0	298.9	299.9	301.8	302.7	304.6	306.6	312.3	313.2	315.2
5°	289.4	293.2	305.6	310.4	323.7	341.9	349.5	361.9	387.7	395.4	400.1
7.5°	277.9	286.5	317.1	324.7	358.1	405.9	425.9	452.7	493.7	513.8	530.0
10°	259.8	277.9	332.3	350.5	404.9	477.5	514.7	552.0	614.1	641.8	652.3
12.5°	239.7	269.3	348.6	373.4	451.7	557.7	602.6	643.7	714.3	751.6	757.3
15°	216.8	256.9	363.9	400.1	501.4	624.6	674.2	724.8	790.7	817.5	824.2
17.5°	196.7	247.3	378.2	416.4	539.6	684.7	735.4	777.4	830.8	849.0	853.8
20°	171.9	232.1	387.7	437.4	579.7	728.7	777.4	809.8	846.1	857.6	859.5
22.5°	153.8	215.8	393.5	445.0	606.4	755.4	796.5	822.3	847.1	850.9	851.9
25°	138.5	197.7	392.5	453.6	629.3	771.6	803.2	822.3	836.6	838.5	838.5
27.5°	124.2	177.6	388.7	455.5	646.5	775.5	800.3	813.7	820.3	824.2	824.2
30°	111.7	158.5	379.1	451.7	654.2	771.6	791.7	798.4	805.1	810.8	813.7
32.5°	102.2	140.4	364.8	444.1	655.1	762.1	776.4	780.2	789.8	803.2	807.9
35°	93.6	122.2	348.6	433.6	649.4	746.8	756.4	760.2	779.3	799.3	806.0
37.5°	85.0	108.9	327.6	415.4	640.8	728.7	735.4	742.0	771.6	795.5	803.2
40°	76.4	97.4	302.7	395.4	627.4	706.7	712.4	722.9	762.1	789.8	797.4
42.5°	69.7	87.9	276.0	374.4	610.2	681.9	690.5	705.7	750.6	780.2	788.8
45°	64.0	78.3	247.3	345.7	588.3	656.1	668.5	689.5	737.3	765.9	773.6
47.5°	58.3	71.6	217.7	316.1	564.4	630.3	646.5	670.4	719.1	746.8	753.5
50°	53.5	64.9	188.1	284.6	538.6	602.6	621.7	646.5	696.2	722.0	730.6
52.5°	49.7	59.2	160.4	253.1	509.0	574.0	595.9	621.7	668.5	693.3	699.1
55°	45.8	54.4	136.6	219.6	478.5	543.4	567.3	592.1	637.9	658.9	662.8
57.5°	43.9	50.6	116.5	188.1	446.0	509.0	535.8	558.7	601.6	617.9	621.7
60°	41.1	47.8	101.2	161.4	410.6	476.5	499.5	522.4	558.7	572.0	574.9
62.5°	38.2	45.8	89.8	135.6	374.4	438.3	461.3	482.3	512.8	522.4	526.2
65°	36.3	43.9	81.2	116.5	337.1	398.2	421.2	439.3	464.1	473.7	475.6
67.5°	34.4	42.0	74.5	100.3	299.9	358.1	375.3	392.5	411.6	421.2	422.1
70°	31.5	40.1	68.8	88.8	261.7	312.3	326.6	344.8	360.0	364.8	367.7
72.5°	29.6	37.2	64.9	80.2	222.5	268.4	281.7	292.2	305.6	310.4	310.4
75°	26.7	33.4	61.1	71.6	182.4	219.6	231.1	241.6	252.1	254.0	251.2
77.5°	23.9	29.6	52.5	60.2	142.3	173.8	183.4	189.1	197.7	199.6	200.5
80°	20.1	25.8	41.1	46.8	103.1	128.0	134.7	139.4	147.1	147.1	149.0
82.5°	15.3	20.1	29.6	33.4	69.7	87.9	93.6	96.5	101.2	101.2	101.2
85°	9.5	12.4	19.1	22.0	42.0	53.5	57.3	58.3	62.1	63.0	63.0
87.5°	4.8	6.7	12.4	13.4	22.0	27.7	27.7	29.6	29.6	28.6	27.7
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.6	22.6
92.5°	23.8	64.3	104.9	115.0	161.6	223.8	254.9	223.4	160.4	113.2	108.7
95°	57.2	131.3	205.4	223.9	397.7	629.3	745.2	665.0	504.5	384.2	370.5
97.5°	98.8	164.3	229.7	246.0	535.7	922.0	1115.1	1064.3	962.9	886.9	860.9
100°	131.0	190.3	249.6	264.4	585.9	1014.5	1228.8	1232.5	1240.0	1245.5	1214.6
102.5°	158.4	213.8	269.1	283.0	609.0	1043.6	1261.0	1325.5	1454.8	1551.7	1525.2
105°	204.9	251.8	298.6	310.4	626.0	1046.9	1257.4	1402.1	1691.8	1909.0	1894.8
107.5°	252.6	296.2	340.0	350.9	629.2	1000.4	1185.9	1387.9	1791.9	2094.9	2098.3
110°	284.7	324.1	363.7	373.5	624.5	959.0	1126.3	1352.2	1803.8	2142.5	2157.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.3	353.9	391.6	400.9	624.7	923.0	1072.2	1303.3	1765.5	2112.2	2134.9
115°	364.0	398.6	433.3	442.0	630.4	881.7	1007.2	1229.8	1675.2	2009.1	2040.7
117.5°	411.0	442.5	474.1	481.9	642.1	855.8	962.5	1163.5	1565.3	1866.7	1901.8
120°	438.3	468.0	497.7	505.1	651.6	847.0	944.7	1128.2	1495.4	1770.9	1804.9
122.5°	465.2	495.1	525.1	532.5	665.3	842.5	931.0	1096.3	1427.0	1675.0	1708.5
125°	506.3	533.6	560.9	567.7	683.8	838.7	916.1	1056.5	1337.4	1548.1	1579.0
127.5°	539.7	567.2	594.7	601.6	702.2	836.5	903.6	1024.2	1265.4	1446.3	1472.3
130°	557.5	587.1	616.7	624.2	715.8	837.8	898.8	1006.2	1220.9	1381.9	1406.0
132.5°	576.0	605.7	635.3	642.7	726.7	838.7	894.6	990.7	1183.0	1327.1	1348.7
135°	603.4	630.4	657.3	664.1	738.6	837.8	887.5	968.0	1128.9	1249.6	1268.2
137.5°	631.4	658.1	684.8	691.5	756.5	843.1	886.3	954.3	1090.4	1192.5	1207.7
140°	654.7	679.3	703.9	710.0	767.4	843.9	882.1	940.9	1058.4	1146.6	1160.8
142.5°	672.5	695.2	718.0	723.7	776.5	846.9	882.1	933.8	1037.0	1114.5	1126.7
145°	699.9	719.8	739.6	744.5	788.4	847.0	876.2	918.4	1002.8	1066.2	1075.4
147.5°	727.2	746.6	765.9	770.8	805.9	852.8	876.2	909.4	975.8	1025.7	1033.3
150°	745.2	762.7	780.0	784.4	815.0	855.8	876.2	904.3	960.3	1002.5	1008.7
152.5°	763.6	776.9	790.1	793.4	821.0	857.8	876.2	900.2	948.1	984.0	988.7
155°	791.0	800.9	810.6	813.1	834.1	862.2	876.2	895.3	933.4	962.0	965.1
157.5°	811.3	820.8	830.3	832.7	847.2	866.6	876.2	891.0	920.6	942.9	945.1
160°	824.9	832.4	839.8	841.6	853.2	868.6	876.2	888.9	914.3	933.3	934.6
162.5°	838.7	844.2	849.8	851.2	859.5	870.7	876.2	886.9	908.4	924.4	925.6
165°	853.6	858.5	863.6	864.8	868.7	873.7	876.2	883.9	899.2	910.7	911.9
167.5°	867.2	869.6	872.0	872.6	875.7	880.0	882.1	887.2	897.2	904.8	905.3
170°	876.2	878.6	881.0	881.6	881.8	882.0	882.1	887.2	897.2	904.8	904.8
172.5°	881.0	881.5	882.0	882.1	882.1	882.1	882.1	886.1	894.1	900.0	899.5
175°	887.5	887.5	887.5	887.5	885.7	883.3	882.1	884.6	889.7	893.5	893.5
177.5°	887.5	887.5	887.5	887.5	886.1	884.3	883.4	885.4	889.3	892.3	891.7
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	297.0	297.0
2.5°	317.1	315.2
5°	407.8	409.7
7.5°	549.1	548.2
10°	682.8	691.4
12.5°	780.2	782.1
15°	839.4	843.3
17.5°	862.4	863.3
20°	863.3	861.4
22.5°	852.8	850.9
25°	840.4	839.4
27.5°	828.9	829.9
30°	824.2	827.0
32.5°	824.2	828.9
35°	826.1	830.8
37.5°	825.1	830.8
40°	821.3	828.0
42.5°	810.8	815.6
45°	794.6	800.3
47.5°	773.6	777.4
50°	746.8	750.6
52.5°	713.4	714.3
55°	673.3	677.1
57.5°	630.3	631.3
60°	582.6	585.4
62.5°	531.9	531.9
65°	478.5	480.4
67.5°	423.1	427.8
70°	366.7	367.7
72.5°	311.3	311.3
75°	254.0	255.0
77.5°	199.6	199.6
80°	148.0	149.0
82.5°	102.2	104.1
85°	64.0	64.0
87.5°	29.6	26.7
90°	22.6	22.6
92.5°	90.6	72.7
95°	316.0	261.5
97.5°	757.2	653.4
100°	1091.0	967.3
102.5°	1419.3	1313.4
105°	1837.9	1781.0
107.5°	2112.1	2125.8
110°	2216.7	2276.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2226.0	2317.0
115°	2167.0	2293.2
117.5°	2041.8	2181.8
120°	1940.9	2077.0
122.5°	1842.8	1976.9
125°	1702.6	1826.2
127.5°	1576.6	1680.9
130°	1502.3	1598.7
132.5°	1434.9	1521.2
135°	1342.6	1417.0
137.5°	1268.6	1329.5
140°	1217.7	1274.6
142.5°	1175.7	1224.6
145°	1112.6	1149.6
147.5°	1064.1	1094.8
150°	1033.6	1058.4
152.5°	1007.5	1026.2
155°	977.5	990.0
157.5°	953.8	962.5
160°	939.6	944.7
162.5°	930.4	935.1
165°	917.0	922.1
167.5°	907.4	909.5
170°	904.8	904.8
172.5°	897.7	895.9
175°	893.5	893.5
177.5°	889.6	887.5
180°	887.5	887.5



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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	2.12	2.84	3.24	3.95	5.50	15.26	15.98	16.38	17.09	18.64
	3H	2.82	3.46	3.94	4.58	6.14	17.08	17.72	18.20	18.84	20.40
	4H	3.11	3.72	4.24	4.84	6.41	17.70	18.31	18.84	19.44	21.00
	6H	3.35	3.91	4.50	5.04	6.62	18.11	18.68	19.26	19.80	21.38
	8H	3.42	3.95	4.56	5.09	6.66	18.22	18.76	19.37	19.90	21.47
	12H	3.43	3.94	4.58	5.07	6.67	18.28	18.79	19.43	19.92	21.52
4H	2H	9.30	9.91	10.44	11.03	12.60	15.52	16.13	16.66	17.25	18.82
	3H	10.85	11.36	12.00	12.51	14.09	17.54	18.05	18.69	19.20	20.78
	4H	10.94	11.41	12.09	12.55	14.15	18.29	18.76	19.44	19.89	21.49
	6H	10.94	11.35	12.10	12.51	14.10	18.81	19.21	19.96	20.37	21.96
	8H	10.92	11.29	12.07	12.45	14.05	18.96	19.33	20.11	20.48	22.09
	12H	10.87	11.21	12.04	12.37	13.98	19.03	19.38	20.21	20.54	22.15
8H	4H	12.36	12.74	13.52	13.89	15.50	18.34	18.71	19.49	19.86	21.47
	6H	12.60	12.91	13.78	14.10	15.71	18.95	19.26	20.12	20.45	22.05
	8H	12.61	12.89	13.80	14.06	15.68	19.16	19.43	20.34	20.60	22.22
	12H	12.58	12.81	13.76	13.99	15.64	19.28	19.52	20.47	20.69	22.35
12H	4H	12.50	12.84	13.67	14.00	15.61	18.28	18.62	19.45	19.79	21.40
	6H	12.85	13.12	14.03	14.30	15.92	18.93	19.20	20.11	20.37	21.99
	8H	12.91	13.15	14.10	14.32	15.98	19.14	19.38	20.33	20.55	22.21