

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: P938002

Luminaire Tested: SQ4-FB-125U-075D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938002  
REPORT IS A COMBINATION OF REPORTS P933598 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-B40-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

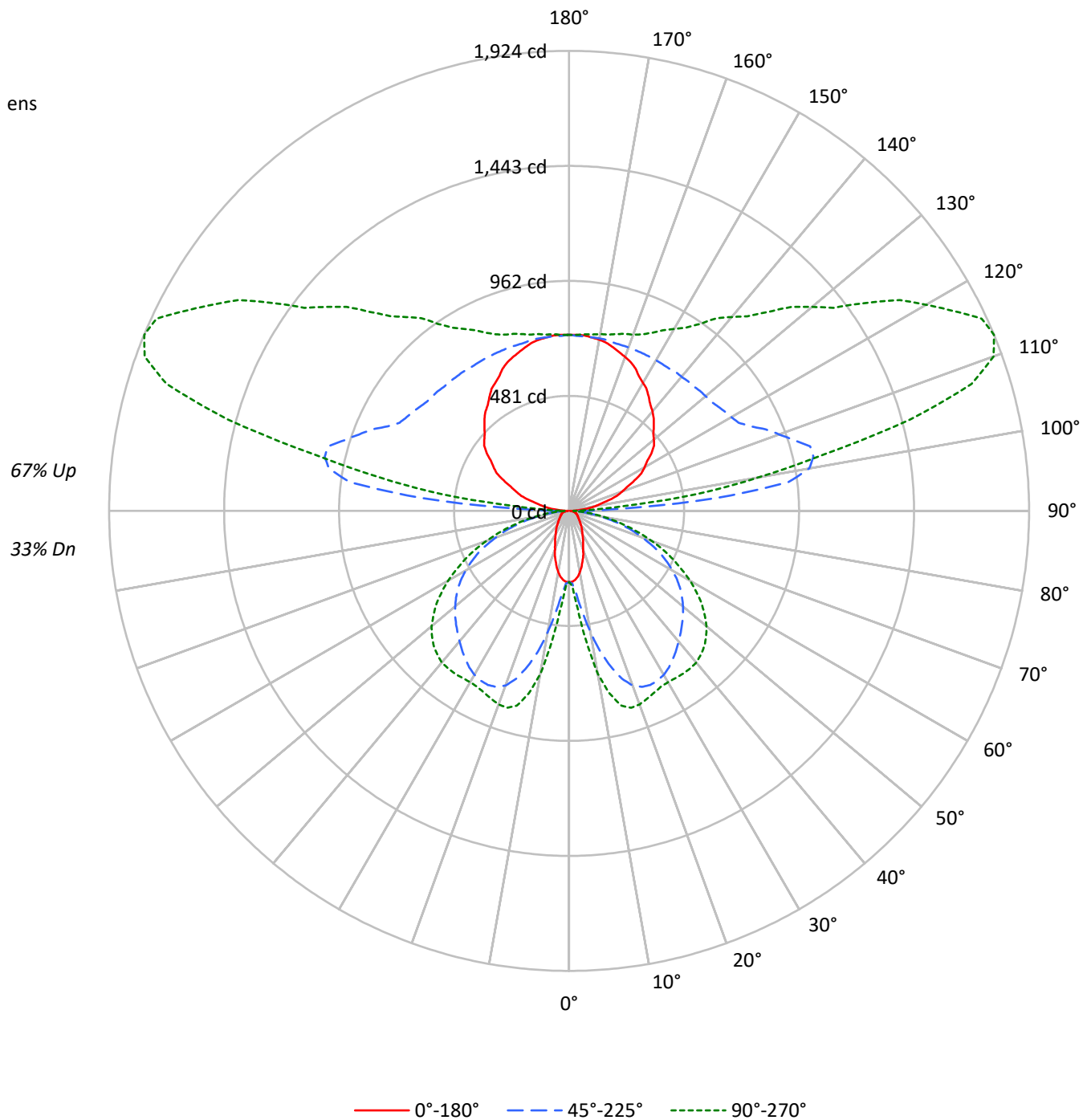
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7076.5 lumens  
Efficiency: N/A  
Efficacy: 127.3 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): 55.6  
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	50	30	10
RCR																							
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33					33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27					27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22					22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18					18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15					15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13					13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11					11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10					10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8					8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7					7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7					7

**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	2.4
20°-30°	297.8	4.2
30°-40°	383.4	5.4
40°-50°	428.2	6.1
50°-60°	410.2	5.8
60°-70°	325.1	4.6
70°-80°	191.1	2.7
80°-90°	55.9	0.8
90°-100°	359.1	5.1
100°-110°	944.2	13.3
110°-120°	979.0	13.8
120°-130°	785.3	11.1
130°-140°	616.2	8.7
140°-150°	472.9	6.7
150°-160°	340.6	4.8
160°-170°	208.4	2.9
170°-180°	70.4	1.0
<b>0°-30°</b>	<b>506.5</b>	<b>7.2</b>
<b>0°-40°</b>	<b>889.9</b>	<b>12.6</b>
<b>0°-60°</b>	<b>1728.3</b>	<b>24.4</b>
<b>0°-90°</b>	<b>2300.4</b>	<b>32.5</b>
<b>90°-120°</b>	<b>2282.3</b>	<b>32.3</b>
<b>90°-150°</b>	<b>4156.6</b>	<b>58.7</b>
<b>90°-180°</b>	<b>4776.0</b>	<b>67.5</b>
<b>0°-180°</b>	<b>7076.5</b>	<b>100.0</b>

**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°	5	14	38	19	19	5
95°	48	186	619	319	217	53
105°	170	258	1044	1585	1478	180
115°	302	367	836	1668	1904	298
125°	420	471	760	1285	1516	373
135°	501	551	737	1037	1176	388
145°	581	618	727	885	954	364
155°	657	675	727	799	822	302
165°	708	718	727	756	765	200
175°	737	737	732	742	742	70
180°	737	737	737	737	737	



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 CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-STD-W-4

**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°	5.0	8.9	12.9	13.8	21.8	32.3	37.5	33.3	25.0	18.8	18.8
92.5°	19.8	53.4	87.0	95.4	134.2	185.8	211.6	185.5	133.2	94.0	90.2
95°	47.5	109.0	170.6	185.9	330.1	522.4	618.6	552.0	418.9	319.0	307.6
97.5°	82.0	136.3	190.6	204.2	444.6	765.2	925.6	883.5	799.3	736.2	714.7
100°	108.8	158.1	207.2	219.6	486.4	842.1	1020.0	1023.1	1029.3	1033.9	1008.2
102.5°	131.5	177.4	223.4	234.8	505.5	866.4	1046.8	1100.4	1207.7	1288.1	1266.1
105°	170.1	209.0	247.9	257.7	519.7	869.1	1043.8	1164.0	1404.4	1584.7	1572.9
107.5°	209.6	245.9	282.2	291.3	522.4	830.5	984.5	1152.2	1487.5	1739.0	1741.8
110°	236.4	269.1	301.8	310.0	518.4	796.2	935.0	1122.5	1497.4	1778.6	1790.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	262.5	293.8	324.9	332.7	518.5	766.2	890.1	1081.9	1465.6	1753.4	1772.3
115°	302.1	330.9	359.7	366.9	523.3	731.8	836.1	1020.9	1390.6	1667.8	1694.0
117.5°	341.2	367.4	393.6	400.0	533.1	710.4	799.0	965.8	1299.4	1549.6	1578.6
120°	364.0	388.6	413.2	419.3	541.0	703.2	784.2	936.7	1241.4	1470.0	1498.3
122.5°	386.2	411.0	435.9	442.1	552.4	699.3	772.9	910.1	1184.6	1390.4	1418.3
125°	420.3	442.9	465.6	471.2	567.7	696.2	760.5	877.1	1110.2	1285.0	1310.7
127.5°	448.0	470.8	493.6	499.4	582.9	694.4	750.1	850.1	1050.4	1200.5	1222.2
130°	462.8	487.4	512.1	518.2	594.2	695.5	746.1	835.2	1013.4	1147.1	1167.1
132.5°	478.2	502.8	527.4	533.6	603.3	696.2	742.7	822.4	982.0	1101.7	1119.5
135°	500.9	523.3	545.7	551.3	613.1	695.5	736.8	803.6	937.2	1037.4	1052.9
137.5°	524.1	546.3	568.5	574.1	627.9	699.8	735.7	792.2	905.1	989.9	1002.5
140°	543.4	563.8	584.3	589.4	637.1	700.6	732.3	781.1	878.7	951.8	963.7
142.5°	558.2	577.1	596.0	600.8	644.6	703.1	732.3	775.2	860.8	925.1	935.2
145°	581.0	597.4	614.0	618.1	654.5	703.1	727.3	762.4	832.5	885.1	892.8
147.5°	603.8	619.8	635.8	639.8	669.0	707.8	727.3	754.9	810.1	851.5	857.9
150°	618.6	633.1	647.6	651.2	676.6	710.4	727.3	750.6	797.2	832.2	837.3
152.5°	633.9	644.9	655.9	658.7	681.6	712.0	727.3	747.2	787.0	816.8	820.7
155°	656.7	664.8	672.9	674.9	692.4	715.7	727.3	743.2	774.8	798.6	801.1
157.5°	673.5	681.4	689.2	691.2	703.3	719.3	727.3	739.6	764.3	782.7	784.5
160°	684.8	690.9	697.2	698.7	708.2	720.9	727.3	737.8	758.9	774.8	775.8
162.5°	696.2	700.8	705.5	706.6	713.5	722.7	727.3	736.2	754.1	767.4	768.4
165°	708.5	712.7	716.9	718.0	721.1	725.2	727.3	733.7	746.4	756.0	757.0
167.5°	720.0	721.9	723.9	724.4	727.0	730.6	732.3	736.5	744.8	751.1	751.6
170°	727.3	729.3	731.3	731.8	732.0	732.2	732.3	736.5	744.8	751.1	751.1
172.5°	731.3	731.7	732.2	732.3	732.3	732.3	732.3	735.5	742.1	747.1	746.7
175°	736.8	736.8	736.8	736.8	735.3	733.2	732.3	734.4	738.5	741.7	741.7
177.5°	736.8	736.8	736.8	736.8	735.6	734.0	733.2	734.9	738.2	740.7	740.2
180°	736.8	736.8	736.8	736.8	736.8	736.8	736.8	736.8	736.8	736.8	736.8



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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°	18.8	18.8
92.5°	75.3	60.4
95°	262.3	217.1
97.5°	628.6	542.4
100°	905.6	803.0
102.5°	1178.2	1090.3
105°	1525.7	1478.4
107.5°	1753.3	1764.7
110°	1840.1	1889.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1847.8	1923.5
115°	1798.8	1903.7
117.5°	1694.9	1811.2
120°	1611.2	1724.2
122.5°	1529.6	1641.1
125°	1413.3	1516.0
127.5°	1308.7	1395.4
130°	1247.1	1327.2
132.5°	1191.2	1262.8
135°	1114.6	1176.3
137.5°	1053.1	1103.6
140°	1010.9	1058.1
142.5°	975.9	1016.6
145°	923.6	954.3
147.5°	883.3	908.8
150°	858.1	878.7
152.5°	836.3	852.0
155°	811.5	821.8
157.5°	791.8	799.0
160°	780.0	784.2
162.5°	772.4	776.3
165°	761.2	765.4
167.5°	753.3	755.0
170°	751.1	751.1
172.5°	745.2	743.7
175°	741.7	741.7
177.5°	738.5	736.8
180°	736.8	736.8



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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	2.65	3.40	3.74	4.49	5.99	15.79	16.54	16.88	17.63	19.12
	3H	3.35	4.02	4.44	5.12	6.63	17.60	18.27	18.70	19.37	20.89
	4H	3.64	4.28	4.75	5.38	6.90	18.23	18.87	19.34	19.97	21.49
	6H	3.88	4.47	5.00	5.57	7.11	18.65	19.23	19.76	20.34	21.87
	8H	3.95	4.51	5.07	5.63	7.15	18.76	19.31	19.88	20.43	21.96
	12H	3.96	4.49	5.09	5.61	7.16	18.81	19.34	19.94	20.46	22.01
4H	2H	9.83	10.46	10.94	11.56	13.09	16.05	16.69	17.17	17.79	19.31
	3H	11.39	11.92	12.51	13.04	14.58	18.07	18.60	19.19	19.73	21.26
	4H	11.48	11.97	12.60	13.08	14.64	18.82	19.31	19.95	20.43	21.98
	6H	11.48	11.90	12.61	13.04	14.59	19.34	19.76	20.47	20.90	22.45
	8H	11.45	11.85	12.59	12.98	14.54	19.49	19.89	20.63	21.02	22.58
	12H	11.41	11.76	12.56	12.90	14.47	19.57	19.93	20.72	21.07	22.64
8H	4H	12.90	13.29	14.03	14.42	15.99	18.87	19.27	20.01	20.40	21.96
	6H	13.14	13.46	14.29	14.64	16.19	19.48	19.81	20.64	20.98	22.54
	8H	13.15	13.44	14.31	14.59	16.17	19.70	19.98	20.85	21.13	22.71
	12H	13.12	13.37	14.28	14.52	16.13	19.83	20.07	20.99	21.22	22.84
12H	4H	13.03	13.39	14.18	14.53	16.10	18.82	19.18	19.97	20.32	21.89
	6H	13.39	13.67	14.55	14.83	16.41	19.47	19.75	20.63	20.90	22.48
	8H	13.45	13.70	14.62	14.85	16.47	19.68	19.93	20.85	21.08	22.70