

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: P938006

Luminaire Tested: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938006  
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-B50-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

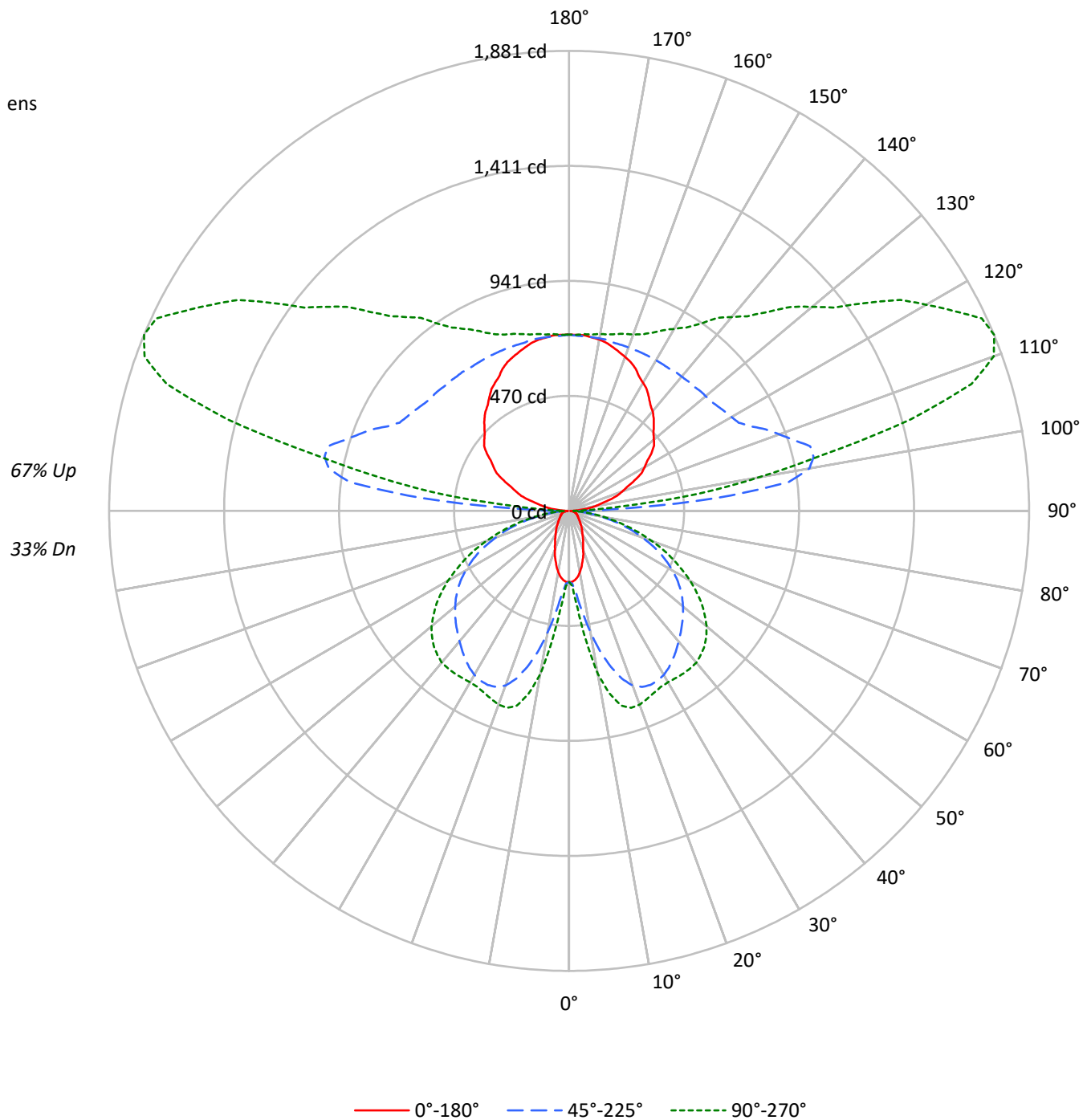
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6920.9 lumens  
Efficiency: N/A  
Efficacy: 124.5 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): 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

TEST NUMBER: P938006  
CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P938006

CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	0														
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°	2696	2696	2696
5°	2630	3113	3623
10°	2383	4534	6006
15°	2023	5920	7252
20°	1645	6855	7392
25°	1370	7168	7241
30°	1154	7208	7227
35°	1019	7082	7415
40°	886	6922	7608
45°	801	6801	7638
50°	733	6692	7511
55°	700	6535	7178
60°	715	6240	6652
65°	740	5794	5930
70°	782	5043	5010
75°	859	4101	3910
80°	917	2834	2634
85°	770	1495	1349

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7638 cd/sqm



TEST NUMBER: P938006

CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.6	0.5
10°-20°	166.5	2.4
20°-30°	291.3	4.2
30°-40°	375.0	5.4
40°-50°	418.8	6.1
50°-60°	401.1	5.8
60°-70°	317.9	4.6
70°-80°	186.9	2.7
80°-90°	54.7	0.8
90°-100°	351.2	5.1
100°-110°	923.4	13.3
110°-120°	957.5	13.8
120°-130°	768.0	11.1
130°-140°	602.6	8.7
140°-150°	462.5	6.7
150°-160°	333.1	4.8
160°-170°	203.8	2.9
170°-180°	68.9	1.0
0°-30°	495.4	7.2
0°-40°	870.4	12.6
0°-60°	1690.3	24.4
0°-90°	2249.8	32.5
90°-120°	2232.1	32.3
90°-150°	4065.2	58.7
90°-180°	4671.0	67.5
0°-180°	6920.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	283	304	342	387	401	26
15°	212	391	659	800	825	59
25°	135	444	786	820	821	62
35°	92	424	740	782	813	57
45°	63	338	654	749	783	48
55°	45	215	555	644	662	41
65°	36	114	412	463	470	35
75°	26	70	226	248	249	27
85°	9	22	56	62	63	10
90°	5	14	37	18	18	5
95°	46	182	605	312	212	52
105°	166	252	1021	1550	1446	176
115°	295	359	818	1631	1862	292
125°	411	461	744	1257	1483	365
135°	490	539	721	1015	1150	379
145°	568	604	711	866	933	356
155°	642	660	711	781	804	295
165°	693	702	711	739	749	196
175°	721	721	716	725	725	68
180°	721	721	721	721	721	



TEST NUMBER: P938006

CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
2.5°	290.5	290.5	292.3	293.3	295.1	296.1	297.9	299.8	305.4	306.4	308.2
5°	283.0	286.7	298.9	303.6	316.6	334.4	341.8	354.0	379.2	386.7	391.3
7.5°	271.8	280.2	310.1	317.6	350.2	397.0	416.6	442.7	482.9	502.5	518.4
10°	254.0	271.8	325.0	342.8	396.0	467.0	503.4	539.9	600.6	627.6	637.9
12.5°	234.4	263.4	340.9	365.2	441.8	545.5	589.4	629.5	698.6	735.1	740.7
15°	212.0	251.2	355.9	391.3	490.4	610.8	659.4	708.9	773.4	799.5	806.0
17.5°	192.4	241.9	369.9	407.2	527.7	669.7	719.2	760.3	812.6	830.3	835.0
20°	168.1	227.0	379.2	427.8	566.9	712.6	760.3	792.0	827.5	838.7	840.6
22.5°	150.4	211.1	384.8	435.2	593.1	738.8	779.0	804.2	828.5	832.2	833.1
25°	135.4	193.3	383.9	443.6	615.5	754.7	785.5	804.2	818.2	820.1	820.1
27.5°	121.4	173.7	380.1	445.5	632.3	758.4	782.7	795.8	802.3	806.0	806.0
30°	109.3	155.0	370.8	441.8	639.8	754.7	774.3	780.8	787.4	793.0	795.8
32.5°	99.9	137.3	356.8	434.3	640.7	745.3	759.3	763.1	772.4	785.5	790.2
35°	91.5	119.6	340.9	424.0	635.1	730.4	739.7	743.5	762.1	781.8	788.3
37.5°	83.1	106.5	320.4	406.3	626.7	712.6	719.2	725.7	754.7	778.0	785.5
40°	74.7	95.3	296.1	386.7	613.6	691.2	696.8	707.0	745.3	772.4	779.9
42.5°	68.2	85.9	269.9	366.1	596.8	666.9	675.3	690.2	734.1	763.1	771.5
45°	62.6	76.6	241.9	338.1	575.3	641.7	653.8	674.3	721.0	749.1	756.5
47.5°	57.0	70.0	213.0	309.2	552.0	616.4	632.3	655.7	703.3	730.4	736.9
50°	52.3	63.5	184.0	278.3	526.8	589.4	608.0	632.3	680.9	706.1	714.5
52.5°	48.6	57.9	156.9	247.5	497.8	561.3	582.8	608.0	653.8	678.1	683.7
55°	44.8	53.2	133.6	214.8	467.9	531.4	554.8	579.1	623.9	644.5	648.2
57.5°	43.0	49.5	113.9	184.0	436.2	497.8	524.0	546.4	588.4	604.3	608.0
60°	40.2	46.7	99.0	157.8	401.6	466.1	488.5	510.9	546.4	559.5	562.3
62.5°	37.4	44.8	87.8	132.6	366.1	428.7	451.1	471.7	501.6	510.9	514.6
65°	35.5	43.0	79.4	113.9	329.7	389.5	411.9	429.6	453.9	463.3	465.1
67.5°	33.6	41.1	72.9	98.1	293.3	350.2	367.1	383.9	402.6	411.9	412.8
70°	30.8	39.2	67.2	86.9	255.9	305.4	319.4	337.2	352.1	356.8	359.6
72.5°	29.0	36.4	63.5	78.5	217.6	262.5	275.5	285.8	298.9	303.6	303.6
75°	26.2	32.7	59.8	70.0	178.4	214.8	226.0	236.3	246.6	248.4	245.6
77.5°	23.4	29.0	51.4	58.8	139.2	170.0	179.3	184.9	193.3	195.2	196.1
80°	19.6	25.2	40.2	45.8	100.9	125.2	131.7	136.4	143.8	143.8	145.7
82.5°	14.9	19.6	29.0	32.7	68.2	85.9	91.5	94.3	99.0	99.0	99.0
85°	9.3	12.1	18.7	21.5	41.1	52.3	56.0	57.0	60.7	61.6	61.6
87.5°	4.7	6.5	12.1	13.1	21.5	27.1	27.1	29.0	29.0	28.0	27.1
90°	4.9	8.7	12.6	13.5	21.3	31.6	36.7	32.6	24.5	18.4	18.4
92.5°	19.3	52.2	85.1	93.3	131.2	181.8	207.0	181.4	130.3	91.9	88.3
95°	46.4	106.6	166.8	181.8	322.9	510.9	605.0	539.9	409.7	312.0	300.8
97.5°	80.2	133.3	186.4	199.7	434.9	748.4	905.2	864.0	781.8	720.0	699.0
100°	106.4	154.6	202.7	214.7	475.7	823.6	997.6	1000.6	1006.7	1011.1	986.0
102.5°	128.6	173.5	218.5	229.7	494.4	847.3	1023.8	1076.2	1181.1	1259.8	1238.3
105°	166.3	204.5	242.5	252.0	508.3	850.0	1020.9	1138.5	1373.5	1549.9	1538.3
107.5°	205.0	240.5	276.0	284.9	510.9	812.2	962.9	1126.9	1454.8	1700.7	1703.5
110°	231.2	263.2	295.1	303.2	507.0	778.7	914.5	1097.8	1464.5	1739.5	1751.5



TEST NUMBER: P938006

CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	256.8	287.3	317.7	325.4	507.1	749.3	870.5	1058.1	1433.4	1714.8	1733.3
115°	295.4	323.6	351.8	358.8	511.8	715.7	817.7	998.4	1360.0	1631.1	1656.7
117.5°	333.7	359.3	384.9	391.3	521.4	694.8	781.5	944.6	1270.8	1515.5	1543.9
120°	355.9	380.0	404.1	410.1	529.1	687.7	767.0	916.1	1214.1	1437.7	1465.4
122.5°	377.7	402.0	426.3	432.3	540.2	684.0	755.9	890.1	1158.5	1359.8	1387.1
125°	411.1	433.2	455.3	460.8	555.2	680.9	743.7	857.8	1085.8	1256.8	1281.9
127.5°	438.1	460.5	482.8	488.4	570.1	679.1	733.6	831.4	1027.3	1174.1	1195.3
130°	452.6	476.7	500.8	506.8	581.1	680.2	729.7	816.9	991.2	1121.9	1141.4
132.5°	467.7	491.8	515.8	521.8	590.0	680.9	726.4	804.4	960.4	1077.5	1094.9
135°	489.9	511.8	533.7	539.2	599.6	680.2	720.6	786.0	916.6	1014.6	1029.7
137.5°	512.6	534.2	556.0	561.4	614.1	684.4	719.6	774.8	885.2	968.1	980.4
140°	531.4	551.4	571.4	576.5	623.1	685.2	716.2	763.9	859.4	930.9	942.5
142.5°	545.9	564.4	582.9	587.6	630.4	687.6	716.2	758.1	841.9	904.8	914.7
145°	568.2	584.3	600.5	604.5	640.1	687.6	711.3	745.6	814.2	865.6	873.2
147.5°	590.5	606.2	621.9	625.8	654.3	692.3	711.3	738.3	792.3	832.8	839.0
150°	605.0	619.1	633.3	636.9	661.7	694.8	711.3	734.1	779.7	813.9	818.9
152.5°	620.0	630.7	641.5	644.2	666.6	696.4	711.3	730.8	769.7	798.9	802.7
155°	642.2	650.2	658.1	660.1	677.2	699.9	711.3	726.8	757.8	781.0	783.5
157.5°	658.7	666.4	674.1	676.0	687.8	703.5	711.3	723.4	747.5	765.5	767.3
160°	669.8	675.7	681.8	683.3	692.7	705.1	711.3	721.6	742.2	757.8	758.8
162.5°	680.9	685.4	689.9	691.1	697.8	706.9	711.3	720.0	737.5	750.6	751.5
165°	692.9	697.0	701.2	702.2	705.3	709.3	711.3	717.6	730.0	739.4	740.4
167.5°	704.1	706.0	708.0	708.4	711.1	714.5	716.2	720.3	728.4	734.6	735.1
170°	711.3	713.3	715.3	715.7	715.9	716.1	716.2	720.3	728.4	734.6	734.6
172.5°	715.3	715.6	716.1	716.2	716.2	716.2	716.2	719.4	725.8	730.7	730.3
175°	720.6	720.6	720.6	720.6	719.1	717.1	716.2	718.2	722.3	725.3	725.3
177.5°	720.6	720.6	720.6	720.6	719.5	717.9	717.1	718.7	722.0	724.4	723.9
180°	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6



TEST NUMBER: P938006

CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	290.5	290.5
2.5°	310.1	308.2
5°	398.8	400.7
7.5°	537.1	536.1
10°	667.8	676.2
12.5°	763.1	764.9
15°	821.0	824.7
17.5°	843.4	844.3
20°	844.3	842.5
22.5°	834.1	832.2
25°	821.9	821.0
27.5°	810.7	811.6
30°	806.0	808.8
32.5°	806.0	810.7
35°	807.9	812.6
37.5°	807.0	812.6
40°	803.2	809.8
42.5°	793.0	797.6
45°	777.1	782.7
47.5°	756.5	760.3
50°	730.4	734.1
52.5°	697.7	698.6
55°	658.5	662.2
57.5°	616.4	617.4
60°	569.7	572.5
62.5°	520.2	520.2
65°	467.9	469.8
67.5°	413.8	418.4
70°	358.7	359.6
72.5°	304.5	304.5
75°	248.4	249.4
77.5°	195.2	195.2
80°	144.8	145.7
82.5°	99.9	101.8
85°	62.6	62.6
87.5°	29.0	26.2
90°	18.4	18.4
92.5°	73.6	59.0
95°	256.6	212.3
97.5°	614.8	530.5
100°	885.7	785.3
102.5°	1152.3	1066.3
105°	1492.2	1445.9
107.5°	1714.7	1725.9
110°	1799.6	1847.7





TEST NUMBER: P938006  
CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1807.2	1881.2
115°	1759.3	1861.8
117.5°	1657.7	1771.3
120°	1575.8	1686.2
122.5°	1496.0	1605.0
125°	1382.2	1482.6
127.5°	1280.0	1364.7
130°	1219.7	1298.0
132.5°	1165.0	1235.0
135°	1090.1	1150.4
137.5°	1029.9	1079.3
140°	988.6	1034.9
142.5°	954.5	994.2
145°	903.3	933.3
147.5°	863.9	888.8
150°	839.2	859.4
152.5°	817.9	833.2
155°	793.6	803.7
157.5°	774.4	781.5
160°	762.9	767.0
162.5°	755.4	759.2
165°	744.5	748.6
167.5°	736.7	738.4
170°	734.6	734.6
172.5°	728.8	727.3
175°	725.3	725.3
177.5°	722.3	720.6
180°	720.6	720.6



TEST NUMBER: P938006  
 CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-STD-W-4

**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	2.57	3.32	3.66	4.41	5.91	15.71	16.46	16.80	17.55	19.05
	3H	3.27	3.94	4.37	5.04	6.55	17.53	18.20	18.62	19.30	20.81
	4H	3.56	4.20	4.67	5.30	6.82	18.16	18.79	19.26	19.89	21.41
	6H	3.81	4.39	4.92	5.50	7.03	18.57	19.15	19.69	20.26	21.79
	8H	3.87	4.43	4.99	5.55	7.08	18.68	19.24	19.80	20.36	21.88
	12H	3.89	4.41	5.01	5.53	7.08	18.74	19.27	19.86	20.38	21.93
4H	2H	9.75	10.39	10.86	11.49	13.01	15.97	16.61	17.09	17.71	19.23
	3H	11.31	11.84	12.43	12.97	14.50	17.99	18.53	19.11	19.65	21.19
	4H	11.40	11.89	12.52	13.00	14.56	18.74	19.23	19.87	20.35	21.90
	6H	11.40	11.82	12.54	12.96	14.51	19.26	19.68	20.40	20.82	22.37
	8H	11.38	11.77	12.51	12.90	14.46	19.42	19.81	20.55	20.94	22.50
	12H	11.33	11.68	12.48	12.83	14.39	19.50	19.85	20.65	21.00	22.56
8H	4H	12.82	13.21	13.95	14.35	15.91	18.80	19.19	19.93	20.32	21.88
	6H	13.06	13.38	14.21	14.56	16.12	19.41	19.73	20.56	20.90	22.46
	8H	13.08	13.36	14.24	14.51	16.09	19.62	19.90	20.78	21.05	22.63
	12H	13.04	13.29	14.20	14.44	16.05	19.75	20.00	20.91	21.15	22.76
12H	4H	12.96	13.31	14.11	14.46	16.02	18.74	19.10	19.89	20.24	21.81
	6H	13.31	13.60	14.47	14.75	16.33	19.39	19.67	20.55	20.83	22.41
	8H	13.38	13.63	14.54	14.78	16.39	19.61	19.85	20.77	21.00	22.62