

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: P937986

Luminaire Tested: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937986
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-B2750-1D-UNV-W2A-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

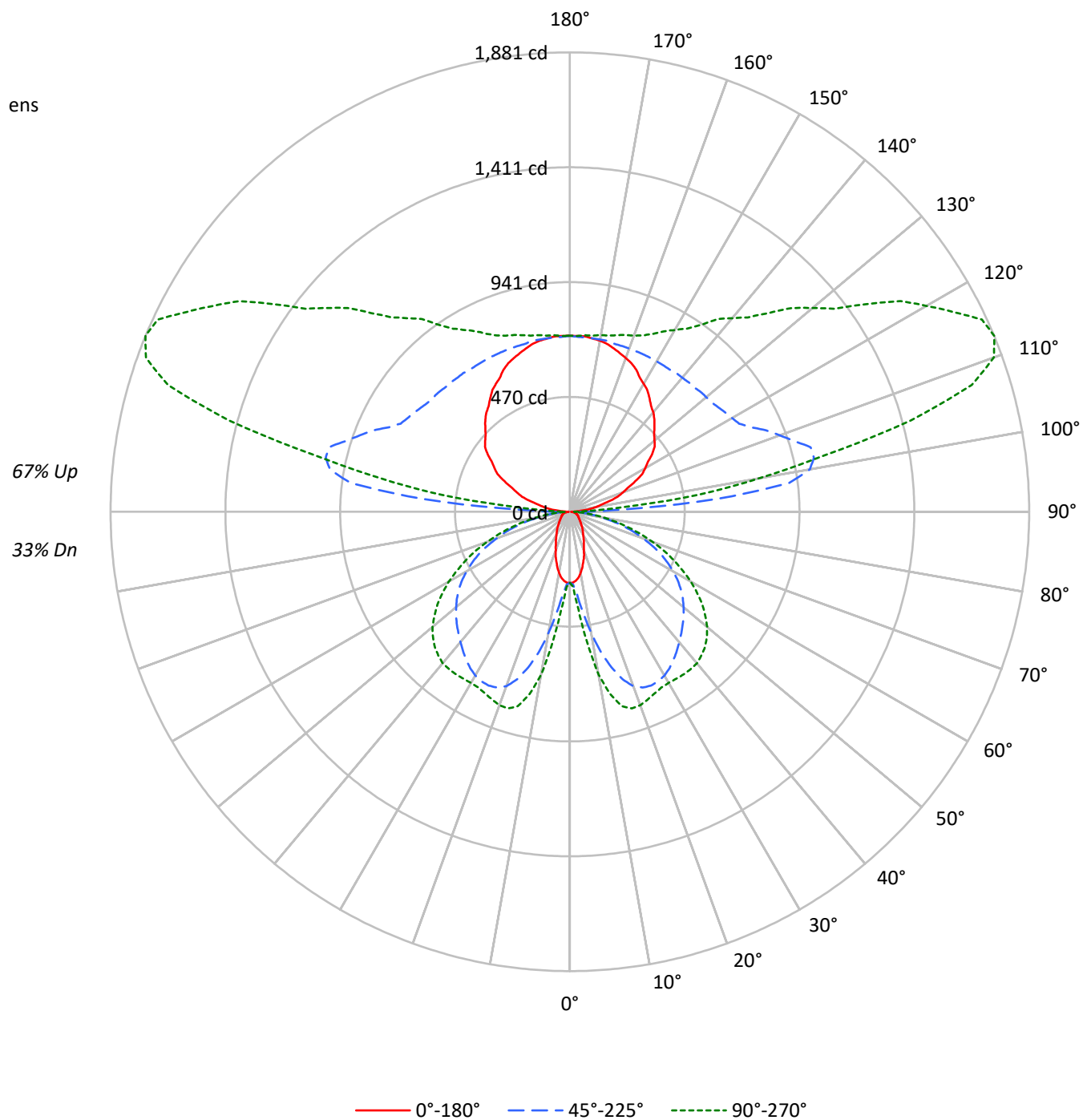
Lumens per Lamp: N/A
Luminaire Lumens: 6920.9 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.6
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P937986

CATALOG NUMBER: SQ4-FB-125U-075D-B2750-1D-UNV-W2A-W-4-5000K

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

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

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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	

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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



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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

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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



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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

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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	2.57	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