

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: P937159

Luminaire Tested: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

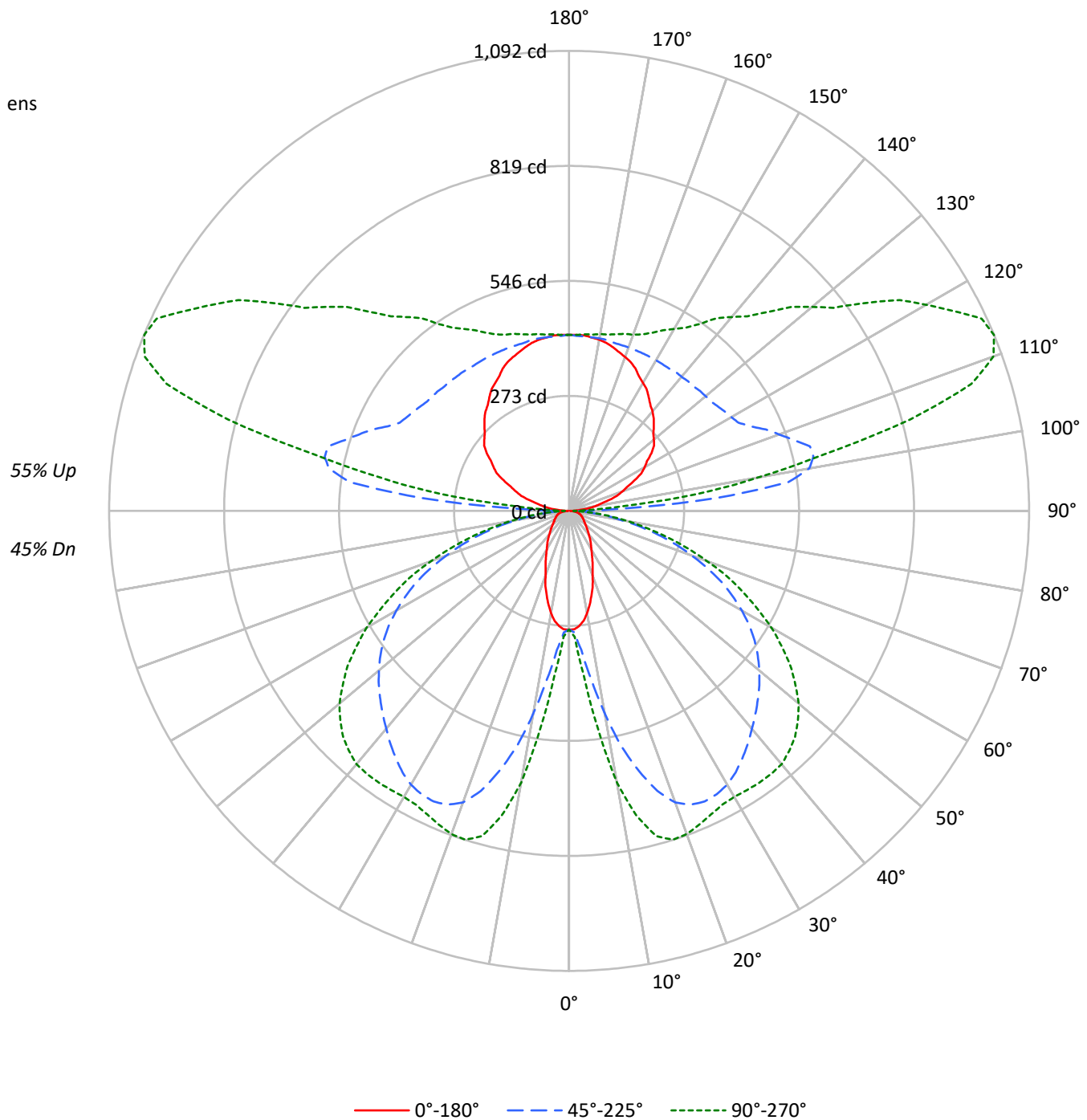
Test Method: LM-79-2019  
Report Number: P937159  
REPORT IS A COMBINATION OF REPORTS P933502 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-93050-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4889.6 lumens  
Efficiency: N/A  
Efficacy: 115.3 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: General Diffuse  
  
Input Watts (W): 42.4  
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





TEST NUMBER: P937159

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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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9

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

	0°	45°	90°
0°	2612	2612	2612
5°	2549	3017	3511
10°	2310	4395	5821
15°	1961	5737	7029
20°	1594	6643	7164
25°	1328	6946	7017
30°	1119	6986	7005
35°	987	6864	7186
40°	859	6708	7373
45°	776	6591	7401
50°	711	6486	7280
55°	678	6333	6957
60°	692	6047	6447
65°	717	5616	5747
70°	759	4888	4855
75°	830	3974	3789
80°	889	2746	2553
85°	754	1449	1306

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7401 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.4	0.7
10°-20°	161.4	3.3
20°-30°	282.3	5.8
30°-40°	363.4	7.4
40°-50°	405.9	8.3
50°-60°	388.8	8.0
60°-70°	308.1	6.3
70°-80°	181.2	3.7
80°-90°	51.9	1.1
90°-100°	203.8	4.2
100°-110°	535.8	11.0
110°-120°	555.6	11.4
120°-130°	445.6	9.1
130°-140°	349.7	7.2
140°-150°	268.4	5.5
150°-160°	193.3	4.0
160°-170°	118.3	2.4
170°-180°	40.0	0.8
0°-30°	480.1	9.8
0°-40°	843.5	17.3
0°-60°	1638.1	33.5
0°-90°	2179.3	44.6
90°-120°	1295.2	26.5
90°-150°	2358.8	48.2
90°-180°	2710.0	55.4
0°-180°	4889.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	282	282	282	282	282	
5°	274	294	331	375	388	25
15°	206	379	639	775	799	57
25°	131	430	761	795	796	60
35°	89	411	717	758	788	55
45°	61	328	634	726	758	47
55°	43	208	538	625	642	40
65°	34	110	399	449	455	34
75°	25	68	219	241	242	27
85°	9	21	54	60	61	10
90°	3	8	21	11	11	3
95°	27	106	351	181	123	30
105°	96	146	592	899	839	102
115°	171	208	474	946	1080	169
125°	238	267	432	729	860	212
135°	284	313	418	589	668	220
145°	330	351	413	502	542	207
155°	373	383	413	453	466	171
165°	402	407	413	429	434	113
175°	418	418	416	421	421	40
180°	418	418	418	418	418	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5
2.5°	281.5	281.5	283.3	284.2	286.0	286.9	288.7	290.6	296.0	296.9	298.7
5°	274.3	277.9	289.7	294.2	306.8	324.0	331.3	343.1	367.5	374.7	379.3
7.5°	263.4	271.5	300.5	307.8	339.4	384.7	403.7	429.0	468.0	487.0	502.4
10°	246.2	263.4	315.0	332.2	383.8	452.6	487.9	523.2	582.0	608.3	618.2
12.5°	227.2	255.3	330.4	353.9	428.1	528.6	571.2	610.1	677.1	712.4	717.8
15°	205.5	243.5	344.9	379.3	475.2	592.0	639.0	687.0	749.5	774.8	781.2
17.5°	186.5	234.4	358.4	394.7	511.4	649.0	697.0	736.8	787.5	804.7	809.2
20°	162.9	220.0	367.5	414.6	549.4	690.6	736.8	767.6	802.0	812.8	814.6
22.5°	145.7	204.6	372.9	421.8	574.8	716.0	754.9	779.3	802.9	806.5	807.4
25°	131.2	187.4	372.0	430.0	596.5	731.4	761.2	779.3	792.9	794.7	794.7
27.5°	117.7	168.4	368.4	431.8	612.8	735.0	758.5	771.2	777.5	781.2	781.2
30°	105.9	150.3	359.3	428.1	620.0	731.4	750.4	756.7	763.1	768.5	771.2
32.5°	96.9	133.1	345.8	420.9	620.9	722.3	735.9	739.5	748.6	761.2	765.8
35°	88.7	115.9	330.4	410.9	615.5	707.8	716.9	720.5	738.6	757.6	764.0
37.5°	80.6	103.2	310.5	393.7	607.4	690.6	697.0	703.3	731.4	754.0	761.2
40°	72.4	92.3	286.9	374.7	594.7	669.8	675.3	685.2	722.3	748.6	755.8
42.5°	66.1	83.3	261.6	354.8	578.4	646.3	654.4	668.9	711.5	739.5	747.7
45°	60.6	74.2	234.4	327.7	557.6	621.8	633.6	653.5	698.8	725.9	733.2
47.5°	55.2	67.9	206.4	299.6	535.0	597.4	612.8	635.4	681.6	707.8	714.2
50°	50.7	61.6	178.3	269.7	510.5	571.2	589.3	612.8	659.9	684.3	692.4
52.5°	47.1	56.1	152.1	239.9	482.5	544.0	564.8	589.3	633.6	657.1	662.6
55°	43.4	51.6	129.4	208.2	453.5	515.0	537.7	561.2	604.6	624.6	628.2
57.5°	41.6	48.0	110.4	178.3	422.7	482.5	507.8	529.5	570.3	585.6	589.3
60°	38.9	45.3	95.9	153.0	389.2	451.7	473.4	495.1	529.5	542.2	544.9
62.5°	36.2	43.4	85.1	128.5	354.8	415.5	437.2	457.1	486.1	495.1	498.7
65°	34.4	41.6	76.9	110.4	319.5	377.5	399.2	416.4	439.9	449.0	450.8
67.5°	32.6	39.8	70.6	95.0	284.2	339.4	355.7	372.0	390.1	399.2	400.1
70°	29.9	38.0	65.2	84.2	248.0	296.0	309.6	326.8	341.2	345.8	348.5
72.5°	28.1	35.3	61.6	76.0	210.9	254.4	267.0	277.0	289.7	294.2	294.2
75°	25.3	31.7	57.9	67.9	172.9	208.2	219.0	229.0	239.0	240.8	238.1
77.5°	22.6	28.1	49.8	57.0	134.9	164.7	173.8	179.2	187.4	189.2	190.1
80°	19.0	24.4	38.9	44.4	97.8	121.3	127.6	132.2	139.4	139.4	141.2
82.5°	14.5	19.0	28.1	31.7	66.1	83.3	88.7	91.4	95.9	95.9	95.9
85°	9.1	11.8	18.1	20.8	39.8	50.7	54.3	55.2	58.8	59.7	59.7
87.5°	4.5	6.3	11.8	12.7	20.8	26.2	26.2	28.1	28.1	27.2	26.2
90°	2.8	5.1	7.3	7.9	12.4	18.4	21.4	19.0	14.2	10.7	10.7
92.5°	11.2	30.3	49.3	54.1	76.1	105.5	120.1	105.3	75.6	53.3	51.2
95°	27.0	61.9	96.9	105.5	187.4	296.4	351.0	313.2	237.6	180.9	174.5
97.5°	46.6	77.4	108.2	115.9	252.4	434.3	525.3	501.4	453.7	417.8	405.6
100°	61.7	89.6	117.6	124.6	276.0	477.9	578.9	580.6	584.1	586.7	572.2
102.5°	74.7	100.7	126.7	133.2	286.8	491.7	594.1	624.5	685.3	730.9	718.4
105°	96.5	118.6	140.7	146.2	294.9	493.2	592.3	660.6	797.0	899.3	892.6
107.5°	118.9	139.6	160.1	165.3	296.4	471.2	558.7	653.8	844.1	986.8	988.4
110°	134.1	152.7	171.3	176.0	294.2	451.8	530.6	637.0	849.7	1009.3	1016.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	149.0	166.7	184.4	188.8	294.3	434.8	505.1	614.0	831.7	995.0	1005.7
115°	171.4	187.7	204.1	208.2	297.0	415.3	474.5	579.4	789.1	946.4	961.3
117.5°	193.6	208.5	223.3	227.0	302.5	403.1	453.4	548.1	737.3	879.4	895.8
120°	206.6	220.5	234.4	238.0	306.9	399.0	445.0	531.5	704.5	834.2	850.2
122.5°	219.1	233.3	247.3	250.8	313.4	396.8	438.6	516.4	672.2	789.0	804.9
125°	238.5	251.4	264.2	267.4	322.1	395.1	431.6	497.7	630.1	729.3	743.9
127.5°	254.3	267.2	280.1	283.4	330.8	394.1	425.7	482.5	596.1	681.3	693.6
130°	262.7	276.6	290.6	294.1	337.2	394.7	423.4	474.0	575.1	651.0	662.3
132.5°	271.4	285.3	299.2	302.8	342.3	395.1	421.4	466.7	557.3	625.2	635.3
135°	284.2	296.9	309.7	312.8	347.9	394.7	418.1	456.0	531.9	588.7	597.5
137.5°	297.4	310.0	322.6	325.8	356.4	397.2	417.6	449.6	513.7	561.7	568.9
140°	308.4	320.0	331.6	334.5	361.5	397.5	415.6	443.3	498.6	540.1	546.8
142.5°	316.8	327.5	338.2	340.9	365.8	399.0	415.6	439.9	488.5	525.0	530.8
145°	329.7	339.1	348.4	350.7	371.4	399.0	412.8	432.7	472.4	502.3	506.6
147.5°	342.6	351.7	360.8	363.1	379.6	401.7	412.8	428.4	459.7	483.2	486.8
150°	351.0	359.3	367.5	369.6	384.0	403.2	412.8	426.0	452.4	472.2	475.1
152.5°	359.7	366.0	372.2	373.7	386.8	404.1	412.8	424.1	446.6	463.5	465.7
155°	372.7	377.3	381.8	383.0	392.9	406.1	412.8	421.7	439.6	453.1	454.6
157.5°	382.2	386.7	391.2	392.3	399.1	408.2	412.8	419.7	433.7	444.2	445.2
160°	388.6	392.1	395.6	396.5	401.9	409.1	412.8	418.7	430.8	439.7	440.3
162.5°	395.1	397.7	400.4	401.0	404.9	410.1	412.8	417.8	427.9	435.5	436.0
165°	402.1	404.4	406.8	407.4	409.2	411.6	412.8	416.4	423.6	429.0	429.7
167.5°	408.5	409.6	410.8	411.0	412.6	414.6	415.6	417.9	422.7	426.2	426.5
170°	412.8	413.8	415.0	415.3	415.4	415.5	415.6	417.9	422.7	426.2	426.2
172.5°	415.0	415.3	415.5	415.6	415.6	415.6	415.6	417.5	421.2	424.0	423.8
175°	418.1	418.1	418.1	418.1	417.3	416.1	415.6	416.7	419.1	420.9	420.9
177.5°	418.1	418.1	418.1	418.1	417.5	416.6	416.1	417.0	418.9	420.4	420.1
180°	418.1	418.1	418.1	418.1	418.1	418.1	418.1	418.1	418.1	418.1	418.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	281.5	281.5
2.5°	300.5	298.7
5°	386.5	388.3
7.5°	520.5	519.6
10°	647.2	655.3
12.5°	739.5	741.3
15°	795.6	799.3
17.5°	817.4	818.3
20°	818.3	816.5
22.5°	808.3	806.5
25°	796.5	795.6
27.5°	785.7	786.6
30°	781.2	783.9
32.5°	781.2	785.7
35°	783.0	787.5
37.5°	782.1	787.5
40°	778.4	784.8
42.5°	768.5	773.0
45°	753.1	758.5
47.5°	733.2	736.8
50°	707.8	711.5
52.5°	676.2	677.1
55°	638.1	641.8
57.5°	597.4	598.3
60°	552.1	554.9
62.5°	504.2	504.2
65°	453.5	455.3
67.5°	401.0	405.5
70°	347.6	348.5
72.5°	295.1	295.1
75°	240.8	241.7
77.5°	189.2	189.2
80°	140.3	141.2
82.5°	96.9	98.7
85°	60.6	60.6
87.5°	28.1	25.3
90°	10.7	10.7
92.5°	42.7	34.2
95°	148.9	123.2
97.5°	356.7	307.8
100°	514.0	455.7
102.5°	668.6	618.7
105°	865.8	839.0
107.5°	995.0	1001.5
110°	1044.2	1072.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1048.6	1091.5
115°	1020.8	1080.3
117.5°	961.8	1027.8
120°	914.3	978.4
122.5°	868.0	931.3
125°	802.1	860.3
127.5°	742.7	791.8
130°	707.7	753.1
132.5°	676.0	716.6
135°	632.5	667.6
137.5°	597.6	626.3
140°	573.7	600.5
142.5°	553.8	576.9
145°	524.1	541.6
147.5°	501.3	515.8
150°	486.9	498.7
152.5°	474.6	483.4
155°	460.5	466.3
157.5°	449.3	453.4
160°	442.6	445.0
162.5°	438.3	440.5
165°	432.0	434.4
167.5°	427.5	428.5
170°	426.2	426.2
172.5°	422.9	422.0
175°	420.9	420.9
177.5°	419.1	418.1
180°	418.1	418.1



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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	3.81	4.66	4.80	5.67	7.01	16.95	17.80	17.94	18.81	20.15
	3H	4.51	5.27	5.52	6.30	7.66	18.77	19.53	19.78	20.55	21.92
	4H	4.81	5.53	5.83	6.56	7.93	19.41	20.13	20.42	21.15	22.52
	6H	5.06	5.73	6.09	6.76	8.14	19.82	20.49	20.85	21.52	22.90
	8H	5.13	5.76	6.16	6.81	8.19	19.94	20.57	20.97	21.62	23.00
	12H	5.15	5.75	6.19	6.79	8.20	20.00	20.60	21.04	21.64	23.05
4H	2H	11.00	11.72	12.02	12.74	14.12	17.22	17.95	18.25	18.97	20.34
	3H	12.57	13.17	13.60	14.22	15.61	19.25	19.86	20.29	20.91	22.29
	4H	12.66	13.22	13.70	14.26	15.67	20.01	20.56	21.05	21.61	23.01
	6H	12.67	13.15	13.72	14.22	15.62	20.53	21.01	21.59	22.08	23.48
	8H	12.65	13.10	13.70	14.16	15.57	20.69	21.14	21.74	22.20	23.61
	12H	12.61	13.01	13.68	14.08	15.51	20.77	21.18	21.85	22.25	23.68
8H	4H	14.10	14.54	15.15	15.60	17.02	20.07	20.52	21.12	21.57	22.99
	6H	14.34	14.71	15.41	15.81	17.22	20.68	21.05	21.76	22.16	23.57
	8H	14.36	14.68	15.44	15.77	17.20	20.90	21.22	21.98	22.31	23.74
	12H	14.32	14.61	15.41	15.69	17.17	21.03	21.32	22.12	22.40	23.87
12H	4H	14.23	14.64	15.31	15.71	17.14	20.02	20.43	21.09	21.50	22.92
	6H	14.59	14.92	15.68	16.00	17.44	20.67	20.99	21.75	22.08	23.51
	8H	14.66	14.95	15.75	16.03	17.50	20.89	21.18	21.98	22.26	23.73