

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: P937110

Luminaire Tested: SQ4-FB-075U-075D-830-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937110
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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

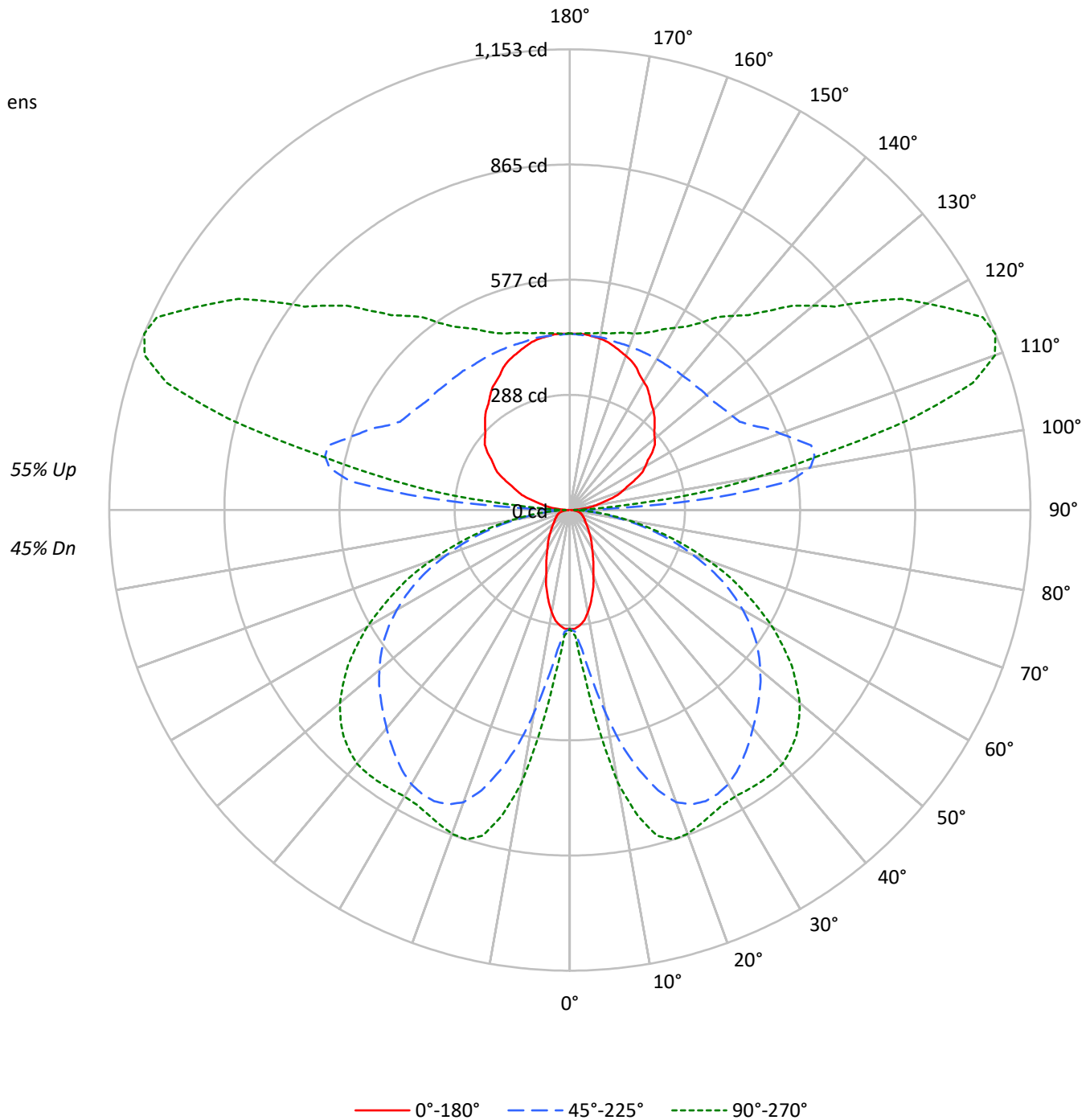
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5164.3 lumens
Efficiency: N/A
Efficacy: 121.8 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 (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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2693	3186	3708
10°	2439	4641	6147
15°	2071	6059	7423
20°	1684	7017	7565
25°	1403	7337	7412
30°	1182	7378	7398
35°	1043	7250	7589
40°	908	7085	7787
45°	821	6961	7817
50°	750	6850	7688
55°	717	6689	7347
60°	731	6387	6809
65°	756	5931	6070
70°	800	5163	5128
75°	879	4199	4002
80°	941	2901	2696
85°	795	1532	1381

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	0.7
10°-20°	170.5	3.3
20°-30°	298.1	5.8
30°-40°	383.8	7.4
40°-50°	428.7	8.3
50°-60°	410.6	8.0
60°-70°	325.4	6.3
70°-80°	191.3	3.7
80°-90°	54.8	1.1
90°-100°	215.3	4.2
100°-110°	565.9	11.0
110°-120°	586.8	11.4
120°-130°	470.7	9.1
130°-140°	369.3	7.2
140°-150°	283.4	5.5
150°-160°	204.1	4.0
160°-170°	124.9	2.4
170°-180°	42.2	0.8
0°-30°	507.1	9.8
0°-40°	890.9	17.3
0°-60°	1730.2	33.5
0°-90°	2301.7	44.6
90°-120°	1367.9	26.5
90°-150°	2491.3	48.2
90°-180°	2863.0	55.4
0°-180°	5164.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	290	311	350	396	410	27
15°	217	401	675	818	844	60
25°	139	454	804	839	840	64
35°	94	434	757	800	832	59
45°	64	346	669	767	801	50
55°	46	220	568	660	678	42
65°	36	117	422	474	481	36
75°	27	72	231	254	255	28
85°	10	22	57	63	64	10
90°	3	8	23	11	11	3
95°	28	112	371	191	130	32
105°	102	154	626	950	886	108
115°	181	220	501	1000	1141	179
125°	252	282	456	770	909	224
135°	300	330	442	622	705	232
145°	348	370	436	530	572	218
155°	394	404	436	479	492	181
165°	425	430	436	453	459	120
175°	442	442	439	444	444	42
180°	442	442	442	442	442	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3
2.5°	297.3	297.3	299.2	300.2	302.1	303.1	305.0	306.9	312.6	313.6	315.5
5°	289.7	293.5	305.9	310.7	324.1	342.2	349.9	362.3	388.1	395.8	400.6
7.5°	278.2	286.8	317.4	325.0	358.5	406.3	426.4	453.1	494.3	514.3	530.6
10°	260.0	278.2	332.7	350.9	405.3	478.0	515.3	552.6	614.7	642.4	652.9
12.5°	240.0	269.6	348.9	373.8	452.2	558.3	603.2	644.3	715.1	752.4	758.1
15°	217.0	257.2	364.2	400.6	501.9	625.2	674.9	725.6	791.6	818.3	825.0
17.5°	196.9	247.6	378.6	416.8	540.1	685.5	736.1	778.2	831.7	849.9	854.7
20°	172.1	232.3	388.1	437.8	580.3	729.4	778.2	810.7	847.0	858.5	860.4
22.5°	153.9	216.1	393.9	445.5	607.1	756.2	797.3	823.1	848.0	851.8	852.8
25°	138.6	197.9	392.9	454.1	630.0	772.4	804.0	823.1	837.5	839.4	839.4
27.5°	124.3	177.8	389.1	456.0	647.2	776.3	801.1	814.5	821.2	825.0	825.0
30°	111.9	158.7	379.5	452.2	654.9	772.4	792.5	799.2	805.9	811.6	814.5
32.5°	102.3	140.5	365.2	444.5	655.8	762.9	777.2	781.1	790.6	804.0	808.8
35°	93.7	122.4	348.9	434.0	650.1	747.6	757.2	761.0	780.1	800.2	806.9
37.5°	85.1	109.0	327.9	415.9	641.5	729.4	736.1	742.8	772.4	796.3	804.0
40°	76.5	97.5	303.1	395.8	628.1	707.4	713.2	723.7	762.9	790.6	798.3
42.5°	69.8	88.0	276.3	374.8	610.9	682.6	691.2	706.5	751.4	781.1	789.7
45°	64.1	78.4	247.6	346.1	588.9	656.8	669.2	690.2	738.0	766.7	774.4
47.5°	58.3	71.7	218.0	316.4	565.0	631.0	647.2	671.1	719.9	747.6	754.3
50°	53.5	65.0	188.3	284.9	539.2	603.2	622.4	647.2	696.9	722.7	731.3
52.5°	49.7	59.3	160.6	253.3	509.5	574.6	596.5	622.4	669.2	694.1	699.8
55°	45.9	54.5	136.7	219.9	479.0	544.0	567.9	592.7	638.6	659.6	663.5
57.5°	44.0	50.7	116.6	188.3	446.5	509.5	536.3	559.3	602.3	618.5	622.4
60°	41.1	47.8	101.3	161.6	411.1	477.0	500.0	522.9	559.3	572.6	575.5
62.5°	38.2	45.9	89.9	135.8	374.8	438.8	461.7	482.8	513.4	522.9	526.8
65°	36.3	44.0	81.3	116.6	337.5	398.7	421.6	439.8	464.6	474.2	476.1
67.5°	34.4	42.1	74.6	100.4	300.2	358.5	375.7	392.9	412.0	421.6	422.6
70°	31.5	40.2	68.8	88.9	261.9	312.6	327.0	345.1	360.4	365.2	368.1
72.5°	29.6	37.3	65.0	80.3	222.7	268.6	282.0	292.5	305.9	310.7	310.7
75°	26.8	33.5	61.2	71.7	182.6	219.9	231.4	241.9	252.4	254.3	251.4
77.5°	23.9	29.6	52.6	60.2	142.4	174.0	183.6	189.3	197.9	199.8	200.8
80°	20.1	25.8	41.1	46.8	103.2	128.1	134.8	139.6	147.2	147.2	149.1
82.5°	15.3	20.1	29.6	33.5	69.8	88.0	93.7	96.6	101.3	101.3	101.3
85°	9.6	12.4	19.1	22.0	42.1	53.5	57.4	58.3	62.1	63.1	63.1
87.5°	4.8	6.7	12.4	13.4	22.0	27.7	27.7	29.6	29.6	28.7	27.7
90°	3.0	5.4	7.7	8.3	13.1	19.4	22.6	20.1	15.0	11.3	11.3
92.5°	11.9	32.0	52.1	57.2	80.4	111.4	126.9	111.2	79.8	56.3	54.1
95°	28.5	65.4	102.3	111.5	197.9	313.1	370.7	330.8	251.0	191.1	184.3
97.5°	49.2	81.7	114.2	122.4	266.5	458.7	554.8	529.5	479.1	441.3	428.4
100°	65.2	94.6	124.2	131.5	291.5	504.8	611.4	613.2	616.9	619.7	604.3
102.5°	78.9	106.4	133.8	140.7	303.0	519.3	627.4	659.5	723.8	772.0	758.8
105°	101.9	125.2	148.6	154.4	311.5	520.9	625.6	697.7	841.8	949.8	942.7
107.5°	125.6	147.4	169.1	174.6	313.1	497.7	590.0	690.5	891.5	1042.2	1044.0
110°	141.7	161.3	181.0	185.8	310.7	477.1	560.4	672.7	897.4	1065.9	1073.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.4	176.1	194.7	199.4	310.8	459.3	533.4	648.5	878.4	1050.8	1062.2
115°	181.1	198.3	215.6	219.9	313.7	438.6	501.1	611.9	833.4	999.6	1015.3
117.5°	204.5	220.2	235.8	239.8	319.5	425.7	478.9	578.9	778.8	928.8	946.2
120°	218.2	232.9	247.6	251.3	324.2	421.4	470.0	561.4	744.1	881.0	898.0
122.5°	231.4	246.4	261.2	264.9	331.0	419.1	463.2	545.4	709.9	833.3	850.1
125°	251.9	265.5	279.1	282.4	340.2	417.3	455.8	525.7	665.5	770.2	785.6
127.5°	268.5	282.2	295.9	299.3	349.4	416.2	449.6	509.6	629.6	719.6	732.6
130°	277.4	292.2	306.9	310.6	356.1	416.8	447.2	500.7	607.4	687.6	699.5
132.5°	286.6	301.3	316.1	319.8	361.6	417.3	445.1	492.9	588.6	660.3	671.0
135°	300.2	313.6	327.0	330.4	367.5	416.9	441.6	481.6	561.7	621.8	631.1
137.5°	314.1	327.4	340.7	344.1	376.4	419.5	441.0	474.8	542.5	593.3	600.8
140°	325.7	337.9	350.2	353.2	381.8	419.9	438.9	468.2	526.6	570.4	577.5
142.5°	334.6	345.9	357.2	360.0	386.3	421.4	438.9	464.6	516.0	554.5	560.6
145°	348.2	358.1	368.0	370.4	392.2	421.4	435.9	457.0	498.9	530.5	535.1
147.5°	361.8	371.4	381.1	383.5	400.9	424.3	435.9	452.5	485.6	510.3	514.1
150°	370.7	379.4	388.1	390.3	405.5	425.8	435.9	449.9	477.8	498.7	501.8
152.5°	379.9	386.5	393.1	394.7	408.5	426.8	435.9	447.9	471.7	489.6	491.9
155°	393.6	398.5	403.2	404.5	415.0	429.0	435.9	445.4	464.3	478.6	480.1
157.5°	403.6	408.4	413.2	414.3	421.5	431.2	435.9	443.3	458.0	469.1	470.2
160°	410.4	414.1	417.8	418.7	424.5	432.1	435.9	442.2	455.0	464.4	465.0
162.5°	417.3	420.1	422.8	423.5	427.6	433.2	435.9	441.3	451.9	459.9	460.5
165°	424.7	427.1	429.6	430.3	432.2	434.7	435.9	439.8	447.4	453.1	453.8
167.5°	431.4	432.6	433.8	434.1	435.7	437.8	438.9	441.4	446.5	450.2	450.5
170°	435.9	437.1	438.3	438.6	438.7	438.8	438.9	441.4	446.5	450.2	450.2
172.5°	438.3	438.6	438.8	438.9	438.9	438.9	438.9	440.9	444.8	447.8	447.6
175°	441.6	441.6	441.6	441.6	440.7	439.5	438.9	440.1	442.6	444.5	444.5
177.5°	441.6	441.6	441.6	441.6	440.9	440.0	439.5	440.4	442.4	444.0	443.7
180°	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	297.3	297.3
2.5°	317.4	315.5
5°	408.2	410.1
7.5°	549.7	548.7
10°	683.5	692.1
12.5°	781.1	783.0
15°	840.3	844.1
17.5°	863.3	864.2
20°	864.2	862.3
22.5°	853.7	851.8
25°	841.3	840.3
27.5°	829.8	830.8
30°	825.0	827.9
32.5°	825.0	829.8
35°	826.9	831.7
37.5°	826.0	831.7
40°	822.2	828.9
42.5°	811.6	816.4
45°	795.4	801.1
47.5°	774.4	778.2
50°	747.6	751.4
52.5°	714.1	715.1
55°	674.0	677.8
57.5°	631.0	631.9
60°	583.2	586.0
62.5°	532.5	532.5
65°	479.0	480.9
67.5°	423.5	428.3
70°	367.1	368.1
72.5°	311.7	311.7
75°	254.3	255.3
77.5°	199.8	199.8
80°	148.2	149.1
82.5°	102.3	104.2
85°	64.1	64.1
87.5°	29.6	26.8
90°	11.3	11.3
92.5°	45.1	36.1
95°	157.3	130.1
97.5°	376.8	325.1
100°	542.8	481.3
102.5°	706.1	653.4
105°	914.4	886.1
107.5°	1050.8	1057.7
110°	1102.8	1132.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1107.5	1152.8
115°	1078.2	1141.0
117.5°	1015.8	1085.5
120°	965.7	1033.3
122.5°	916.8	983.6
125°	847.1	908.6
127.5°	784.4	836.3
130°	747.5	795.4
132.5°	713.9	756.9
135°	668.1	705.0
137.5°	631.2	661.5
140°	605.9	634.2
142.5°	584.9	609.3
145°	553.5	572.0
147.5°	529.4	544.7
150°	514.2	526.7
152.5°	501.2	510.6
155°	486.3	492.5
157.5°	474.6	478.9
160°	467.5	470.0
162.5°	462.9	465.3
165°	456.3	458.8
167.5°	451.5	452.6
170°	450.2	450.2
172.5°	446.6	445.7
175°	444.5	444.5
177.5°	442.6	441.6
180°	441.6	441.6



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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	4.00	4.85	4.99	5.86	7.20	17.14	17.99	18.13	19.00	20.34
	3H	4.71	5.47	5.71	6.49	7.85	18.96	19.72	19.97	20.74	22.11
	4H	5.00	5.73	6.02	6.75	8.12	19.60	20.32	20.61	21.34	22.71
	6H	5.25	5.92	6.28	6.95	8.33	20.01	20.68	21.04	21.71	23.09
	8H	5.32	5.96	6.36	7.00	8.38	20.13	20.76	21.16	21.81	23.19
	12H	5.34	5.94	6.38	6.98	8.39	20.19	20.79	21.23	21.83	23.24
4H	2H	11.19	11.91	12.21	12.93	14.31	17.41	18.14	18.44	19.16	20.53
	3H	12.76	13.36	13.79	14.41	15.80	19.44	20.05	20.48	21.10	22.48
	4H	12.85	13.41	13.89	14.45	15.86	20.20	20.75	21.24	21.80	23.20
	6H	12.86	13.34	13.91	14.41	15.81	20.72	21.20	21.78	22.27	23.67
	8H	12.84	13.29	13.89	14.34	15.76	20.88	21.33	21.93	22.38	23.80
	12H	12.79	13.20	13.87	14.27	15.70	20.96	21.37	22.03	22.44	23.87
8H	4H	14.29	14.73	15.34	15.79	17.21	20.26	20.70	21.31	21.76	23.18
	6H	14.53	14.90	15.60	16.00	17.41	20.87	21.24	21.95	22.35	23.76
	8H	14.55	14.87	15.63	15.95	17.39	21.09	21.41	22.17	22.50	23.93
	12H	14.51	14.80	15.60	15.88	17.35	21.22	21.51	22.31	22.59	24.06
12H	4H	14.42	14.83	15.50	15.90	17.33	20.21	20.61	21.28	21.69	23.11
	6H	14.78	15.11	15.86	16.19	17.63	20.86	21.18	21.94	22.27	23.70
	8H	14.85	15.14	15.94	16.22	17.69	21.08	21.37	22.17	22.45	23.92