

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: P937182

Luminaire Tested: SQ4-FB-075U-075D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

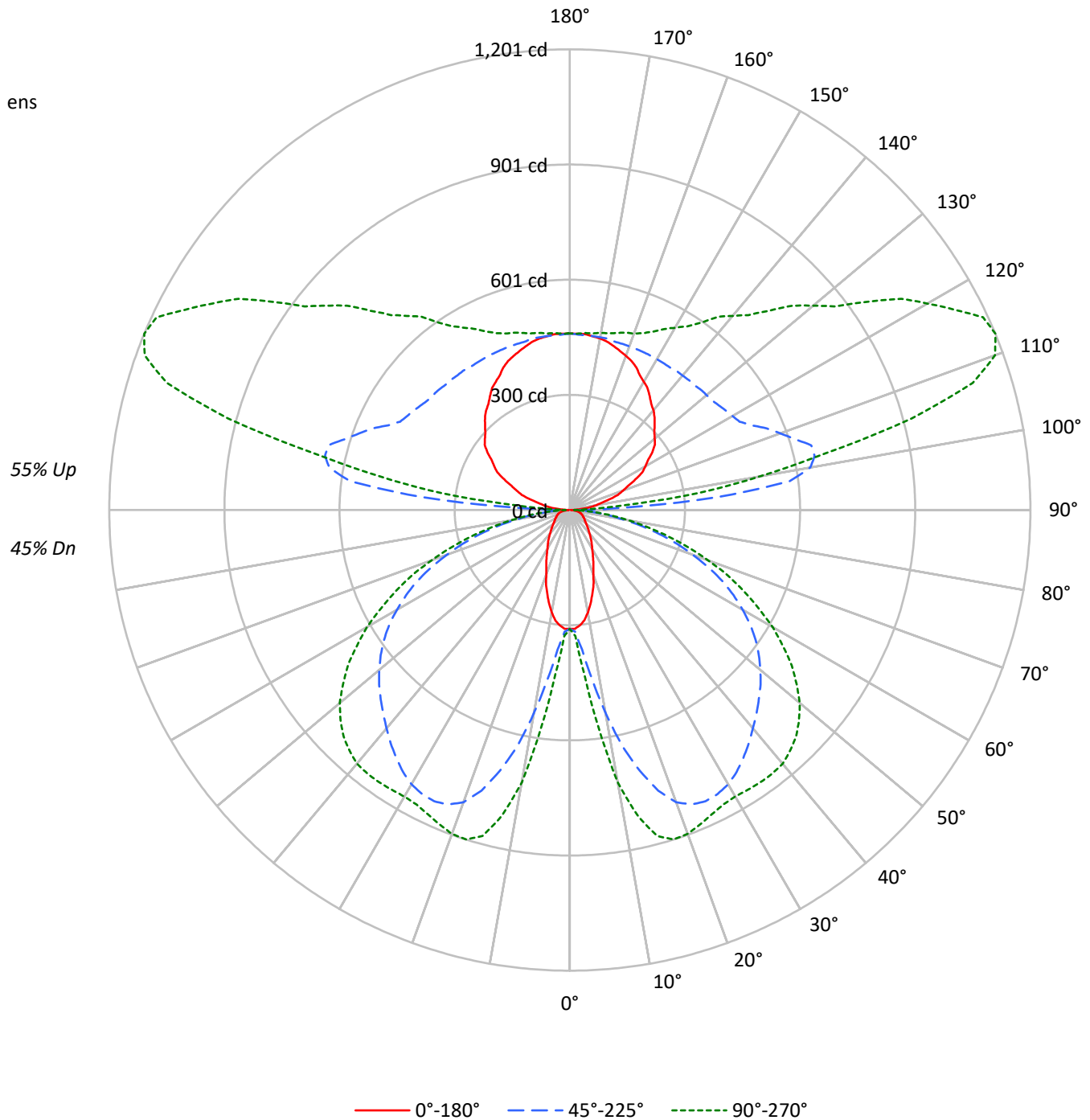
Test Method: LM-79-2019  
Report Number: P937182  
REPORT IS A COMBINATION OF REPORTS P933502 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-B2750-1D-UNV-STD-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5380.3 lumens  
Efficiency: N/A  
Efficacy: 126.9 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





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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°	2875	2875	2875
5°	2805	3319	3864
10°	2541	4835	6405
15°	2158	6313	7734
20°	1755	7310	7882
25°	1461	7644	7722
30°	1231	7687	7707
35°	1087	7552	7907
40°	946	7381	8112
45°	854	7253	8144
50°	782	7136	8010
55°	747	6968	7655
60°	761	6653	7093
65°	788	6178	6324
70°	835	5377	5343
75°	915	4373	4169
80°	978	3021	2810
85°	828	1596	1437

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8144 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.1	0.7
10°-20°	177.6	3.3
20°-30°	310.6	5.8
30°-40°	399.9	7.4
40°-50°	446.6	8.3
50°-60°	427.8	8.0
60°-70°	339.0	6.3
70°-80°	199.3	3.7
80°-90°	57.1	1.1
90°-100°	224.3	4.2
100°-110°	589.6	11.0
110°-120°	611.3	11.4
120°-130°	490.4	9.1
130°-140°	384.8	7.2
140°-150°	295.3	5.5
150°-160°	212.7	4.0
160°-170°	130.1	2.4
170°-180°	44.0	0.8
0°-30°	528.3	9.8
0°-40°	928.1	17.3
0°-60°	1802.5	33.5
0°-90°	2398.0	44.6
90°-120°	1425.1	26.5
90°-150°	2595.5	48.2
90°-180°	2982.0	55.4
0°-180°	5380.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	310	310	310	310	310	
5°	302	324	364	412	427	28
15°	226	417	703	853	880	63
25°	144	473	838	874	876	67
35°	98	452	789	834	866	61
45°	67	361	697	799	835	52
55°	48	229	592	687	706	44
65°	38	122	439	494	501	38
75°	28	75	241	265	266	29
85°	10	23	60	66	67	11
90°	3	9	24	12	12	3
95°	30	116	386	199	136	33
105°	106	161	652	990	923	113
115°	189	229	522	1041	1189	186
125°	262	294	475	802	947	233
135°	313	344	460	648	735	242
145°	363	386	454	553	596	227
155°	410	421	454	499	513	188
165°	442	448	454	472	478	125
175°	460	460	457	463	463	44
180°	460	460	460	460	460	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8
2.5°	309.8	309.8	311.7	312.7	314.7	315.7	317.7	319.7	325.7	326.7	328.7
5°	301.8	305.8	318.7	323.7	337.6	356.6	364.5	377.5	404.4	412.3	417.3
7.5°	289.8	298.8	330.7	338.6	373.5	423.3	444.2	472.1	514.9	535.8	552.8
10°	270.9	289.8	346.6	365.5	422.3	498.0	536.8	575.7	640.4	669.3	680.3
12.5°	250.0	280.9	363.5	389.4	471.1	581.7	628.5	671.3	745.0	783.9	789.8
15°	226.1	267.9	379.5	417.3	522.9	651.4	703.2	756.0	824.7	852.6	859.5
17.5°	205.2	258.0	394.4	434.3	562.7	714.1	766.9	810.7	866.5	885.4	890.4
20°	179.3	242.0	404.4	456.2	604.6	759.9	810.7	844.6	882.5	894.4	896.4
22.5°	160.4	225.1	410.4	464.1	632.5	787.8	830.7	857.6	883.5	887.4	888.4
25°	144.4	206.2	409.4	473.1	656.4	804.8	837.6	857.6	872.5	874.5	874.5
27.5°	129.5	185.3	405.4	475.1	674.3	808.8	834.6	848.6	855.6	859.5	859.5
30°	116.5	165.3	395.4	471.1	682.3	804.8	825.7	832.7	839.6	845.6	848.6
32.5°	106.6	146.4	380.5	463.1	683.3	794.8	809.7	813.7	823.7	837.6	842.6
35°	97.6	127.5	363.5	452.2	677.3	778.9	788.8	792.8	812.7	833.7	840.6
37.5°	88.6	113.5	341.6	433.3	668.3	759.9	766.9	773.9	804.8	829.7	837.6
40°	79.7	101.6	315.7	412.3	654.4	737.0	743.0	754.0	794.8	823.7	831.7
42.5°	72.7	91.6	287.8	390.4	636.4	711.1	720.1	736.0	782.9	813.7	822.7
45°	66.7	81.7	258.0	360.6	613.5	684.3	697.2	719.1	768.9	798.8	806.8
47.5°	60.8	74.7	227.1	329.7	588.6	657.4	674.3	699.2	750.0	778.9	785.8
50°	55.8	67.7	196.2	296.8	561.7	628.5	648.4	674.3	726.1	753.0	761.9
52.5°	51.8	61.8	167.3	263.9	530.9	598.6	621.5	648.4	697.2	723.1	729.1
55°	47.8	56.8	142.4	229.1	499.0	566.7	591.6	617.5	665.3	687.2	691.2
57.5°	45.8	52.8	121.5	196.2	465.1	530.9	558.8	582.7	627.5	644.4	648.4
60°	42.8	49.8	105.6	168.3	428.3	497.0	520.9	544.8	582.7	596.6	599.6
62.5°	39.8	47.8	93.6	141.4	390.4	457.2	481.1	503.0	534.9	544.8	548.8
65°	37.8	45.8	84.7	121.5	351.6	415.3	439.2	458.2	484.1	494.0	496.0
67.5°	35.9	43.8	77.7	104.6	312.7	373.5	391.4	409.4	429.3	439.2	440.2
70°	32.9	41.8	71.7	92.6	272.9	325.7	340.6	359.6	375.5	380.5	383.5
72.5°	30.9	38.8	67.7	83.7	232.1	279.9	293.8	304.8	318.7	323.7	323.7
75°	27.9	34.9	63.7	74.7	190.2	229.1	241.0	252.0	262.9	264.9	261.9
77.5°	24.9	30.9	54.8	62.7	148.4	181.3	191.2	197.2	206.2	208.2	209.2
80°	20.9	26.9	42.8	48.8	107.6	133.5	140.4	145.4	153.4	153.4	155.4
82.5°	15.9	20.9	30.9	34.9	72.7	91.6	97.6	100.6	105.6	105.6	105.6
85°	10.0	12.9	19.9	22.9	43.8	55.8	59.8	60.8	64.7	65.7	65.7
87.5°	5.0	7.0	12.9	13.9	22.9	28.9	28.9	30.9	30.9	29.9	28.9
90°	3.1	5.6	8.1	8.7	13.6	20.2	23.5	20.9	15.6	11.8	11.8
92.5°	12.4	33.4	54.3	59.6	83.8	116.0	132.2	115.8	83.2	58.7	56.4
95°	29.7	68.1	106.6	116.1	206.2	326.2	386.2	344.6	261.4	199.1	192.0
97.5°	51.3	85.2	119.0	127.5	277.7	477.9	578.0	551.7	499.2	459.8	446.3
100°	67.9	98.6	129.4	137.0	303.7	525.9	636.9	638.8	642.7	645.6	629.6
102.5°	82.2	110.9	139.4	146.6	315.6	541.0	653.7	687.1	754.1	804.3	790.5
105°	106.2	130.5	154.8	160.9	324.5	542.7	651.8	726.9	877.0	989.5	982.2
107.5°	130.9	153.6	176.2	181.9	326.2	518.5	614.7	719.4	928.8	1085.8	1087.6
110°	147.6	168.0	188.5	193.6	323.7	497.1	583.9	700.9	934.9	1110.5	1118.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	163.9	183.5	202.9	207.8	323.8	478.5	555.8	675.6	915.1	1094.8	1106.7
115°	188.6	206.6	224.6	229.1	326.8	457.0	522.1	637.5	868.3	1041.4	1057.8
117.5°	213.0	229.4	245.7	249.8	332.9	443.5	498.9	603.1	811.3	967.6	985.7
120°	227.3	242.6	258.0	261.8	337.7	439.0	489.6	584.9	775.2	917.9	935.5
122.5°	241.1	256.7	272.1	276.0	344.8	436.6	482.6	568.2	739.6	868.2	885.6
125°	262.4	276.6	290.7	294.2	354.5	434.8	474.9	547.7	693.3	802.5	818.5
127.5°	279.8	294.0	308.3	311.8	364.0	433.7	468.4	531.0	656.0	749.7	763.2
130°	289.0	304.4	319.7	323.6	371.0	434.3	465.9	521.6	632.9	716.3	728.8
132.5°	298.6	313.9	329.3	333.2	376.7	434.8	463.7	513.5	613.2	687.9	699.1
135°	312.7	326.7	340.7	344.2	382.9	434.4	460.1	501.8	585.2	647.8	657.5
137.5°	327.3	341.1	355.0	358.5	392.1	437.0	459.5	494.7	565.2	618.1	626.0
140°	339.3	352.1	364.8	368.0	397.8	437.4	457.3	487.7	548.6	594.3	601.7
142.5°	348.6	360.4	372.1	375.1	402.5	439.0	457.3	484.1	537.5	577.7	584.1
145°	362.7	373.1	383.4	386.0	408.7	439.0	454.2	476.1	519.8	552.7	557.5
147.5°	377.0	386.9	397.0	399.5	417.7	442.0	454.2	471.4	505.9	531.7	535.6
150°	386.2	395.3	404.4	406.7	422.5	443.6	454.2	468.7	497.8	519.6	522.8
152.5°	395.8	402.7	409.6	411.2	425.6	444.6	454.2	466.6	491.4	510.1	512.4
155°	410.1	415.1	420.1	421.4	432.4	446.9	454.2	464.0	483.8	498.6	500.2
157.5°	420.5	425.5	430.5	431.7	439.1	449.2	454.2	461.8	477.2	488.7	489.8
160°	427.6	431.5	435.3	436.2	442.2	450.2	454.2	460.7	474.0	483.9	484.5
162.5°	434.8	437.6	440.5	441.2	445.5	451.3	454.2	459.8	470.8	479.2	479.8
165°	442.4	445.0	447.6	448.3	450.3	452.9	454.2	458.2	466.1	472.1	472.8
167.5°	449.5	450.7	452.0	452.3	454.0	456.2	457.3	459.9	465.1	469.0	469.3
170°	454.2	455.4	456.7	457.0	457.1	457.2	457.3	459.9	465.1	469.0	469.0
172.5°	456.7	457.0	457.2	457.3	457.3	457.3	457.3	459.4	463.4	466.5	466.3
175°	460.1	460.1	460.1	460.1	459.2	457.9	457.3	458.6	461.1	463.1	463.1
177.5°	460.1	460.1	460.1	460.1	459.4	458.4	457.9	458.9	460.9	462.5	462.2
180°	460.1	460.1	460.1	460.1	460.1	460.1	460.1	460.1	460.1	460.1	460.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	309.8	309.8
2.5°	330.7	328.7
5°	425.3	427.3
7.5°	572.7	571.7
10°	712.1	721.1
12.5°	813.7	815.7
15°	875.5	879.5
17.5°	899.4	900.4
20°	900.4	898.4
22.5°	889.4	887.4
25°	876.5	875.5
27.5°	864.5	865.5
30°	859.5	862.5
32.5°	859.5	864.5
35°	861.5	866.5
37.5°	860.5	866.5
40°	856.6	863.5
42.5°	845.6	850.6
45°	828.7	834.6
47.5°	806.8	810.7
50°	778.9	782.9
52.5°	744.0	745.0
55°	702.2	706.2
57.5°	657.4	658.4
60°	607.6	610.5
62.5°	554.8	554.8
65°	499.0	501.0
67.5°	441.2	446.2
70°	382.5	383.5
72.5°	324.7	324.7
75°	264.9	265.9
77.5°	208.2	208.2
80°	154.4	155.4
82.5°	106.6	108.6
85°	66.7	66.7
87.5°	30.9	27.9
90°	11.8	11.8
92.5°	47.0	37.6
95°	163.8	135.6
97.5°	392.5	338.7
100°	565.5	501.4
102.5°	735.6	680.8
105°	952.7	923.2
107.5°	1094.8	1102.0
110°	1149.0	1179.8





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1153.9	1201.1
115°	1123.3	1188.7
117.5°	1058.3	1131.0
120°	1006.1	1076.6
122.5°	955.2	1024.8
125°	882.6	946.6
127.5°	817.2	871.3
130°	778.8	828.7
132.5°	743.8	788.5
135°	696.0	734.6
137.5°	657.6	689.1
140°	631.3	660.7
142.5°	609.4	634.8
145°	576.7	595.9
147.5°	551.6	567.5
150°	535.7	548.7
152.5°	522.2	532.0
155°	506.7	513.1
157.5°	494.4	498.9
160°	487.0	489.6
162.5°	482.3	484.8
165°	475.4	478.0
167.5°	470.4	471.5
170°	469.0	469.0
172.5°	465.3	464.3
175°	463.1	463.1
177.5°	461.1	460.1
180°	460.1	460.1



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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	4.14	4.99	5.14	6.00	7.34	17.28	18.13	18.28	19.14	20.48
	3H	4.85	5.61	5.85	6.63	7.99	19.10	19.87	20.11	20.89	22.25
	4H	5.14	5.87	6.16	6.89	8.26	19.74	20.46	20.76	21.48	22.86
	6H	5.40	6.06	6.42	7.09	8.47	20.16	20.82	21.18	21.85	23.23
	8H	5.46	6.10	6.50	7.14	8.52	20.27	20.90	21.30	21.95	23.33
	12H	5.48	6.08	6.52	7.12	8.53	20.33	20.93	21.37	21.97	23.38
4H	2H	11.33	12.05	12.36	13.08	14.45	17.56	18.28	18.58	19.30	20.67
	3H	12.90	13.50	13.93	14.56	15.94	19.58	20.19	20.62	21.24	22.63
	4H	12.99	13.55	14.04	14.59	16.00	20.34	20.89	21.38	21.94	23.35
	6H	13.00	13.48	14.06	14.55	15.95	20.87	21.34	21.92	22.41	23.81
	8H	12.98	13.43	14.03	14.49	15.91	21.02	21.47	22.07	22.53	23.95
	12H	12.94	13.34	14.01	14.42	15.84	21.11	21.51	22.18	22.58	24.01
8H	4H	14.43	14.87	15.48	15.93	17.35	20.40	20.85	21.45	21.91	23.33
	6H	14.67	15.04	15.75	16.14	17.56	21.02	21.39	22.09	22.49	23.90
	8H	14.69	15.01	15.77	16.10	17.53	21.23	21.55	22.31	22.64	24.07
	12H	14.66	14.94	15.74	16.02	17.50	21.36	21.65	22.45	22.73	24.21
12H	4H	14.57	14.97	15.64	16.04	17.47	20.35	20.76	21.42	21.83	23.26
	6H	14.92	15.25	16.01	16.33	17.77	21.00	21.33	22.08	22.41	23.85
	8H	14.99	15.28	16.08	16.36	17.84	21.22	21.51	22.31	22.59	24.06