

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: P936970

Luminaire Tested: SQ4-FB-050U-125D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936970
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

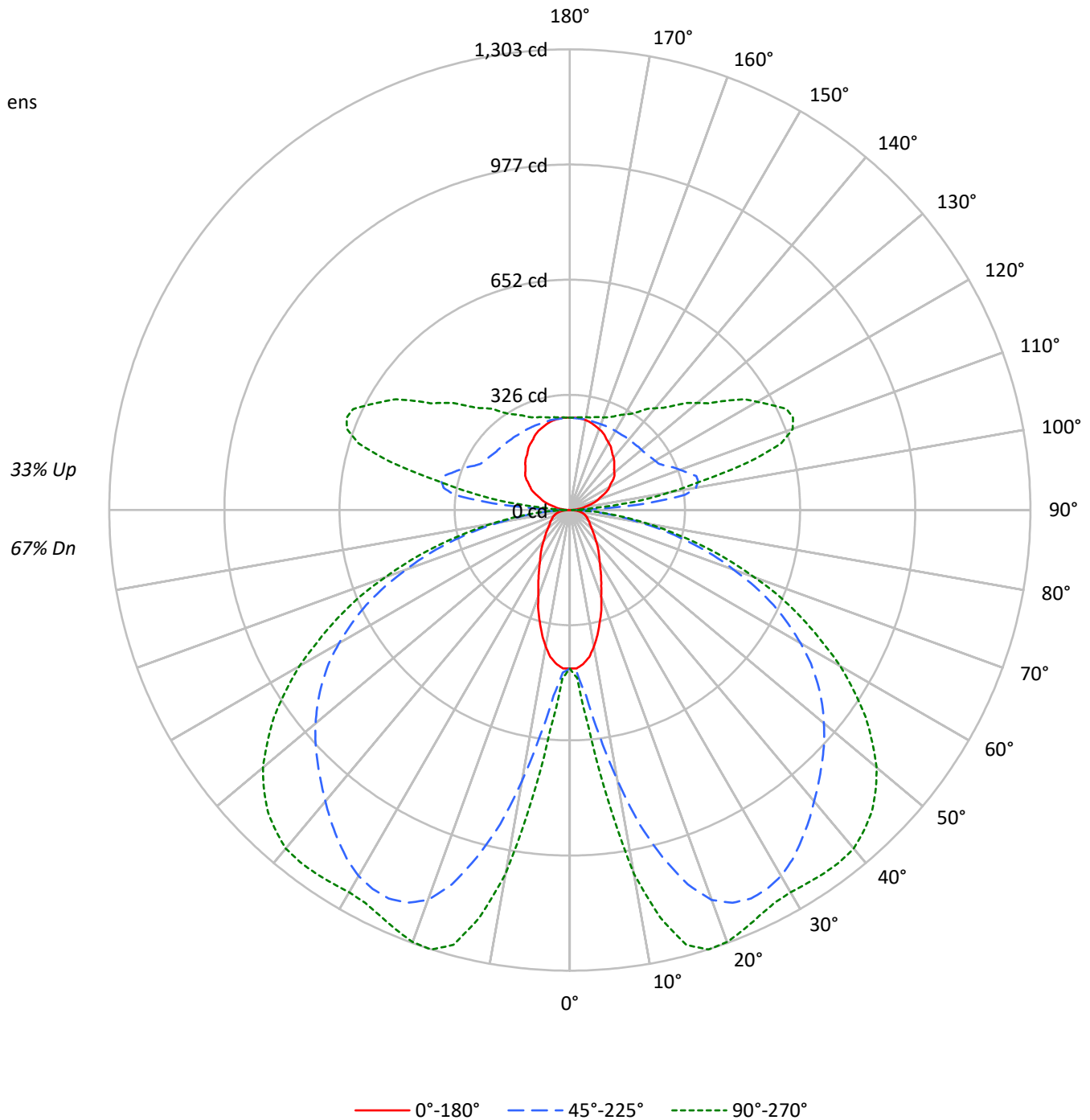
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5165.6 lumens
Efficiency: N/A
Efficacy: 92.2 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-Direct

Input Watts (W): 56
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	
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4160	4160	4160
5°	4060	4805	5592
10°	3678	6998	9271
15°	3123	9137	11195
20°	2539	10581	11409
25°	2116	11065	11178
30°	1782	11125	11156
35°	1573	10932	11444
40°	1369	10683	11743
45°	1237	10498	11789
50°	1133	10330	11594
55°	1081	10086	11079
60°	1103	9631	10269
65°	1142	8944	9153
70°	1206	7785	7733
75°	1325	6331	6034
80°	1413	4375	4066
85°	1192	2309	2081

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11789 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	1.1
10°-20°	257.0	5.0
20°-30°	449.6	8.7
30°-40°	578.8	11.2
40°-50°	646.5	12.5
50°-60°	619.2	12.0
60°-70°	490.7	9.5
70°-80°	288.5	5.6
80°-90°	81.2	1.6
90°-100°	127.5	2.5
100°-110°	335.3	6.5
110°-120°	347.7	6.7
120°-130°	278.9	5.4
130°-140°	218.8	4.2
140°-150°	168.0	3.3
150°-160°	121.0	2.3
160°-170°	74.0	1.4
170°-180°	25.0	0.5
0°-30°	764.7	14.8
0°-40°	1343.4	26.0
0°-60°	2609.1	50.5
0°-90°	3469.5	67.2
90°-120°	810.5	15.7
90°-150°	1476.2	28.6
90°-180°	1696.0	32.8
0°-180°	5165.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	437	468	528	597	618	40
15°	327	604	1018	1234	1273	91
25°	209	685	1212	1266	1267	96
35°	141	654	1142	1207	1254	88
45°	97	522	1009	1156	1208	75
55°	69	332	856	995	1022	63
65°	55	176	636	715	725	54
75°	40	108	349	384	385	42
85°	14	33	86	95	97	15
90°	2	5	13	7	7	2
95°	17	66	220	113	77	19
105°	60	92	371	563	525	64
115°	107	130	297	592	676	106
125°	149	167	270	456	538	133
135°	178	196	262	368	418	138
145°	206	220	258	314	339	129
155°	233	240	258	284	292	107
165°	252	255	258	268	272	71
175°	262	262	260	263	263	25
180°	262	262	262	262	262	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
2.5°	448.3	448.3	451.2	452.7	455.6	457.0	459.9	462.8	471.4	472.9	475.8
5°	436.8	442.6	461.4	468.5	488.7	516.1	527.6	546.4	585.3	596.8	604.1
7.5°	419.5	432.5	478.7	490.2	540.6	612.7	643.0	683.4	745.3	775.6	800.1
10°	392.1	419.5	501.7	529.1	611.2	720.8	777.0	833.3	927.0	968.8	984.7
12.5°	361.8	406.6	526.2	563.7	681.9	841.9	909.7	971.7	1078.4	1134.6	1143.2
15°	327.3	387.8	549.3	604.1	756.8	942.8	1017.8	1094.2	1193.7	1234.0	1244.2
17.5°	297.0	373.4	570.9	628.6	814.5	1033.6	1110.1	1173.5	1254.2	1281.7	1288.8
20°	259.5	350.3	585.3	660.3	875.1	1100.0	1173.5	1222.5	1277.3	1294.6	1297.5
22.5°	232.1	325.8	593.9	671.8	915.5	1140.3	1202.3	1241.3	1278.8	1284.6	1285.9
25°	209.1	298.5	592.6	684.8	950.1	1164.9	1212.5	1241.3	1262.9	1265.8	1265.8
27.5°	187.4	268.1	586.8	687.6	976.0	1170.6	1208.1	1228.3	1238.4	1244.2	1244.2
30°	168.7	239.3	572.4	681.9	987.6	1164.9	1195.1	1205.2	1215.3	1224.0	1228.3
32.5°	154.3	211.9	550.7	670.4	989.0	1150.5	1172.1	1177.8	1192.3	1212.5	1219.6
35°	141.3	184.5	526.2	654.5	980.3	1127.4	1141.8	1147.6	1176.4	1206.7	1216.7
37.5°	128.3	164.4	494.5	627.2	967.4	1100.0	1110.1	1120.2	1164.9	1200.9	1212.5
40°	115.4	147.1	457.0	596.8	947.2	1066.8	1075.5	1091.3	1150.5	1192.3	1203.8
42.5°	105.2	132.7	416.6	565.1	921.2	1029.4	1042.3	1065.4	1133.2	1177.8	1190.8
45°	96.6	118.3	373.4	521.8	888.0	990.4	1009.2	1040.9	1113.0	1156.2	1167.8
47.5°	87.9	108.1	328.7	477.2	852.0	951.5	976.0	1012.1	1085.5	1127.4	1137.5
50°	80.8	98.1	284.0	429.6	813.1	909.7	938.6	976.0	1050.9	1089.9	1102.9
52.5°	75.0	89.4	242.2	382.0	768.4	866.4	899.6	938.6	1009.2	1046.7	1055.3
55°	69.2	82.1	206.2	331.6	722.2	820.3	856.3	893.8	963.0	994.7	1000.5
57.5°	66.3	76.4	175.9	284.0	673.3	768.4	808.8	843.4	908.2	932.8	938.6
60°	62.0	72.1	152.8	243.7	619.9	719.4	754.0	788.6	843.4	863.6	867.8
62.5°	57.7	69.2	135.6	204.7	565.1	661.7	696.3	728.0	774.2	788.6	794.3
65°	54.8	66.3	122.5	175.9	508.9	601.2	635.8	663.2	700.7	715.1	718.0
67.5°	51.9	63.5	112.5	151.4	452.7	540.6	566.6	592.6	621.4	635.8	637.2
70°	47.5	60.6	103.8	134.1	395.0	471.4	493.1	520.4	543.5	550.7	555.1
72.5°	44.7	56.2	98.1	121.1	335.9	405.1	425.3	441.2	461.4	468.5	468.5
75°	40.4	50.4	92.3	108.1	275.4	331.6	348.9	364.7	380.6	383.5	379.1
77.5°	36.0	44.7	79.3	90.8	214.8	262.4	276.8	285.4	298.5	301.3	302.7
80°	30.2	38.9	62.0	70.6	155.7	193.1	203.3	210.4	222.0	222.0	224.9
82.5°	23.1	30.2	44.7	50.4	105.2	132.7	141.3	145.6	152.8	152.8	152.8
85°	14.4	18.7	28.8	33.1	63.5	80.8	86.5	87.9	93.7	95.2	95.2
87.5°	7.2	10.1	18.7	20.2	33.1	41.8	41.8	44.7	44.7	43.3	41.8
90°	1.8	3.2	4.6	4.9	7.8	11.5	13.4	11.8	8.9	6.6	6.6
92.5°	7.0	18.9	30.9	33.9	47.6	65.9	75.1	65.9	47.3	33.4	32.0
95°	16.9	38.7	60.6	66.0	117.2	185.5	219.6	196.0	148.7	113.2	109.2
97.5°	29.1	48.4	67.6	72.5	157.9	271.8	328.7	313.8	283.9	261.5	253.8
100°	38.6	56.1	73.6	78.0	172.7	299.1	362.3	363.4	365.6	367.2	358.1
102.5°	46.7	63.0	79.3	83.4	179.5	307.7	371.7	390.8	428.9	457.4	449.6
105°	60.4	74.2	88.0	91.5	184.5	308.7	370.7	413.4	498.8	562.8	558.7
107.5°	74.5	87.3	100.2	103.4	185.5	295.0	349.7	409.2	528.3	617.6	618.6
110°	83.9	95.5	107.2	110.1	184.1	282.8	332.1	398.7	531.8	631.7	636.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.2	104.3	115.4	118.2	184.1	272.1	316.1	384.3	520.5	622.7	629.5
115°	107.3	117.5	127.7	130.3	185.8	259.9	296.9	362.5	493.8	592.3	601.6
117.5°	121.2	130.4	139.7	142.0	189.3	252.3	283.8	343.0	461.4	550.3	560.6
120°	129.2	138.0	146.7	148.9	192.1	249.7	278.5	332.6	440.9	522.1	532.2
122.5°	137.2	146.0	154.8	157.0	196.1	248.4	274.4	323.2	420.7	493.8	503.7
125°	149.3	157.3	165.3	167.3	201.6	247.3	270.1	311.5	394.3	456.4	465.5
127.5°	159.1	167.2	175.3	177.4	207.0	246.7	266.4	301.9	373.0	426.3	434.0
130°	164.4	173.1	181.8	184.0	211.0	247.0	265.0	296.7	360.0	407.4	414.5
132.5°	169.8	178.6	187.3	189.5	214.3	247.3	263.8	292.1	348.7	391.2	397.6
135°	177.9	185.8	193.8	195.8	217.8	247.0	261.6	285.3	332.8	368.4	373.9
137.5°	186.2	194.0	201.9	203.9	223.1	248.5	261.3	281.3	321.5	351.5	356.1
140°	193.0	200.2	207.5	209.3	226.2	248.8	260.0	277.4	312.1	338.1	342.2
142.5°	198.3	205.0	211.6	213.3	228.9	249.6	260.0	275.3	305.7	328.5	332.1
145°	206.4	212.1	218.0	219.5	232.4	249.7	258.3	270.8	295.6	314.3	317.0
147.5°	214.4	220.2	225.8	227.2	237.6	251.4	258.3	268.1	287.7	302.4	304.7
150°	219.6	224.8	230.0	231.2	240.3	252.3	258.3	266.6	283.1	295.6	297.4
152.5°	225.1	229.0	232.9	233.9	242.1	252.9	258.3	265.4	279.5	290.1	291.5
155°	233.2	236.1	239.0	239.7	245.9	254.2	258.3	263.9	275.2	283.6	284.6
157.5°	239.2	242.0	244.8	245.5	249.7	255.4	258.3	262.7	271.4	278.0	278.7
160°	243.2	245.4	247.6	248.1	251.5	256.0	258.3	262.1	269.6	275.2	275.5
162.5°	247.3	248.9	250.5	250.9	253.4	256.7	258.3	261.5	267.8	272.6	272.9
165°	251.7	253.1	254.7	255.0	256.1	257.6	258.3	260.5	265.1	268.5	268.8
167.5°	255.7	256.4	257.0	257.2	258.2	259.4	260.0	261.6	264.5	266.8	266.9
170°	258.3	259.0	259.7	259.9	259.9	260.0	260.0	261.6	264.5	266.8	266.8
172.5°	259.7	259.9	260.0	260.0	260.0	260.0	260.0	261.2	263.5	265.3	265.1
175°	261.6	261.6	261.6	261.6	261.1	260.4	260.0	260.8	262.3	263.4	263.4
177.5°	261.6	261.6	261.6	261.6	261.2	260.7	260.5	261.1	262.2	263.1	262.9
180°	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6	261.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	448.3	448.3
2.5°	478.7	475.8
5°	615.6	618.5
7.5°	829.0	827.5
10°	1030.7	1043.8
12.5°	1177.8	1180.7
15°	1267.3	1273.0
17.5°	1301.9	1303.3
20°	1303.3	1300.4
22.5°	1287.4	1284.6
25°	1268.6	1267.3
27.5°	1251.3	1252.8
30°	1244.2	1248.5
32.5°	1244.2	1251.3
35°	1247.1	1254.2
37.5°	1245.6	1254.2
40°	1239.8	1249.9
42.5°	1224.0	1231.1
45°	1199.4	1208.1
47.5°	1167.8	1173.5
50°	1127.4	1133.2
52.5°	1076.9	1078.4
55°	1016.4	1022.1
57.5°	951.5	953.0
60°	879.4	883.8
62.5°	803.0	803.0
65°	722.2	725.1
67.5°	638.7	645.9
70°	553.6	555.1
72.5°	470.0	470.0
75°	383.5	384.9
77.5°	301.3	301.3
80°	223.5	224.9
82.5°	154.3	157.1
85°	96.6	96.6
87.5°	44.7	40.4
90°	6.6	6.6
92.5°	26.8	21.4
95°	93.1	77.1
97.5°	223.2	192.6
100°	321.6	285.2
102.5°	418.4	387.2
105°	541.9	525.1
107.5°	622.6	626.7
110°	653.5	670.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	656.3	683.1
115°	638.8	676.1
117.5°	601.9	643.3
120°	572.2	612.3
122.5°	543.3	582.9
125°	501.9	538.4
127.5°	464.8	495.5
130°	443.0	471.3
132.5°	423.0	448.5
135°	395.8	417.7
137.5°	373.9	391.9
140°	359.0	375.8
142.5°	346.6	361.1
145°	328.0	338.9
147.5°	313.7	322.7
150°	304.8	312.1
152.5°	297.0	302.5
155°	288.2	291.9
157.5°	281.2	283.8
160°	277.1	278.5
162.5°	274.3	275.7
165°	270.3	271.9
167.5°	267.5	268.1
170°	266.8	266.8
172.5°	264.6	264.1
175°	263.4	263.4
177.5°	262.3	261.6
180°	261.6	261.6



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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	7.37	8.47	8.16	9.28	10.28	20.51	21.61	21.30	22.42	23.42
	3H	8.10	9.08	8.89	9.91	10.94	22.35	23.34	23.15	24.16	25.19
	4H	8.40	9.34	9.22	10.17	11.21	23.00	23.93	23.81	24.76	25.80
	6H	8.67	9.53	9.50	10.37	11.43	23.43	24.29	24.26	25.13	26.19
	8H	8.74	9.57	9.58	10.43	11.48	23.55	24.37	24.39	25.23	26.29
	12H	8.77	9.56	9.61	10.41	11.49	23.62	24.41	24.46	25.26	26.34
4H	2H	14.59	15.53	15.41	16.36	17.40	20.81	21.75	21.63	22.58	23.62
	3H	16.18	16.97	17.01	17.83	18.89	22.87	23.65	23.70	24.52	25.57
	4H	16.29	17.00	17.13	17.87	18.95	23.63	24.35	24.48	25.21	26.29
	6H	16.31	16.93	17.17	17.82	18.91	24.17	24.80	25.04	25.68	26.77
	8H	16.30	16.88	17.16	17.76	18.86	24.34	24.92	25.20	25.80	26.90
	12H	16.26	16.79	17.15	17.69	18.80	24.43	24.96	25.32	25.86	26.97
8H	4H	17.74	18.32	18.61	19.21	20.31	23.71	24.30	24.58	25.18	26.28
	6H	17.99	18.48	18.89	19.40	20.50	24.34	24.83	25.24	25.75	26.85
	8H	18.02	18.45	18.92	19.36	20.48	24.56	24.99	25.46	25.90	27.02
	12H	18.00	18.37	18.90	19.28	20.45	24.71	25.08	25.61	25.99	27.16
12H	4H	17.89	18.42	18.78	19.32	20.43	23.68	24.20	24.57	25.11	26.21
	6H	18.25	18.68	19.16	19.60	20.72	24.33	24.76	25.23	25.68	26.79
	8H	18.33	18.71	19.24	19.62	20.79	24.56	24.94	25.47	25.85	27.02