

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: P936950

Luminaire Tested: SQ4-FB-050U-125D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936950
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-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

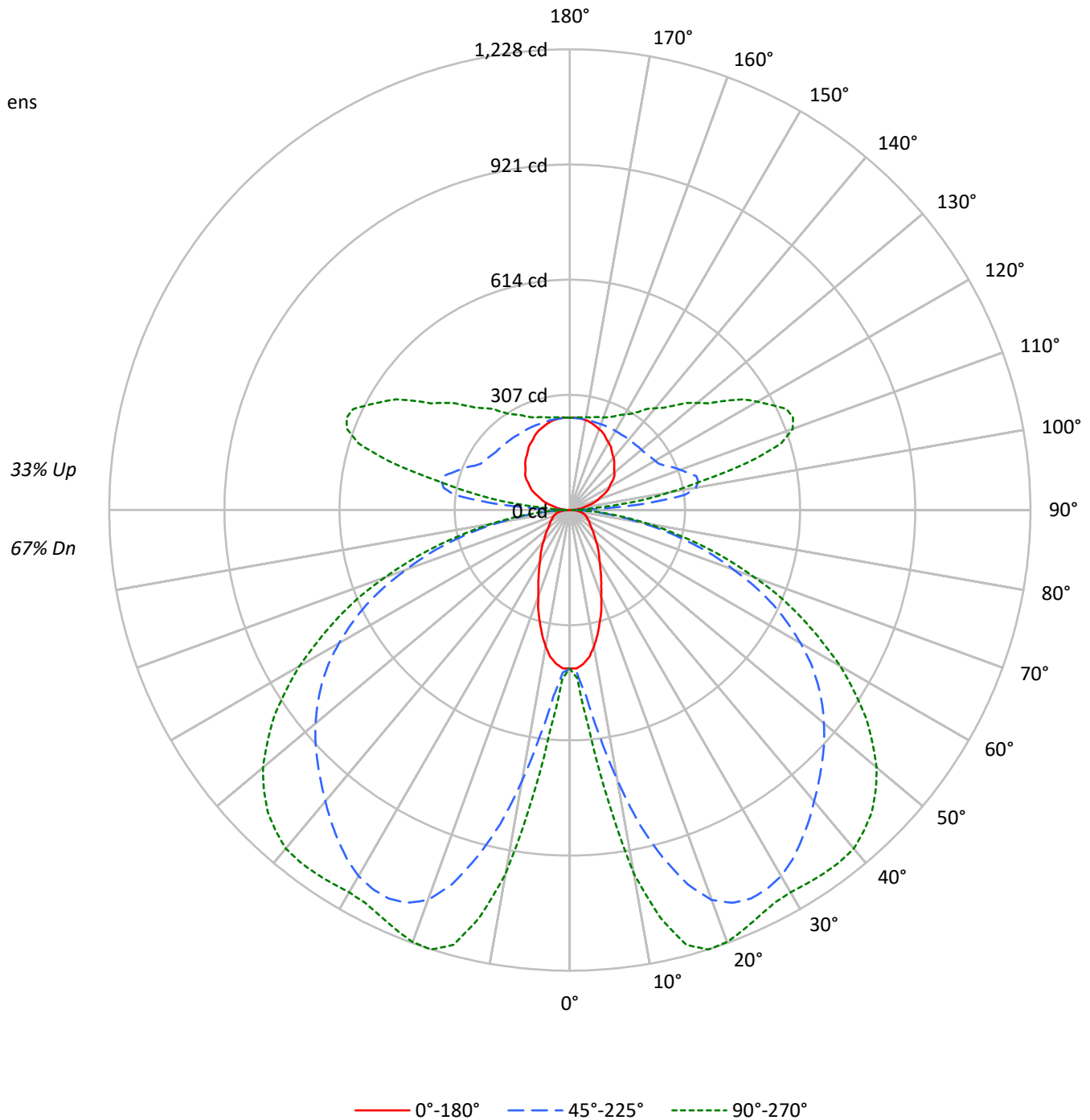
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4868.6 lumens
Efficiency: N/A
Efficacy: 86.9 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: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3920	3920	3920
5°	3826	4529	5271
10°	3466	6596	8738
15°	2943	8612	10551
20°	2394	9973	10753
25°	1995	10428	10535
30°	1679	10486	10515
35°	1482	10303	10786
40°	1290	10069	11067
45°	1166	9895	11111
50°	1067	9736	10927
55°	1018	9507	10443
60°	1041	9078	9679
65°	1075	8429	8626
70°	1137	7336	7289
75°	1249	5966	5688
80°	1334	4123	3833
85°	1126	2175	1963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11111 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	1.1
10°-20°	242.3	5.0
20°-30°	423.8	8.7
30°-40°	545.5	11.2
40°-50°	609.3	12.5
50°-60°	583.6	12.0
60°-70°	462.5	9.5
70°-80°	271.9	5.6
80°-90°	76.5	1.6
90°-100°	120.2	2.5
100°-110°	316.0	6.5
110°-120°	327.7	6.7
120°-130°	262.9	5.4
130°-140°	206.2	4.2
140°-150°	158.3	3.3
150°-160°	114.0	2.3
160°-170°	69.8	1.4
170°-180°	23.6	0.5
0°-30°	720.7	14.8
0°-40°	1266.2	26.0
0°-60°	2459.1	50.5
0°-90°	3270.0	67.2
90°-120°	763.9	15.7
90°-150°	1391.3	28.6
90°-180°	1599.0	32.8
0°-180°	4868.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	412	442	497	562	583	38
15°	308	569	959	1163	1200	86
25°	197	645	1143	1193	1194	91
35°	133	617	1076	1137	1182	83
45°	91	492	951	1090	1139	70
55°	65	312	807	938	963	59
65°	52	166	599	674	683	51
75°	38	102	329	361	363	40
85°	14	31	82	90	91	14
90°	2	5	13	6	6	2
95°	16	62	207	107	73	18
105°	57	86	349	530	495	60
115°	101	123	280	558	637	100
125°	141	158	255	430	507	125
135°	168	184	247	347	394	130
145°	194	207	244	296	319	122
155°	220	226	244	267	275	101
165°	237	240	244	253	256	67
175°	247	247	245	248	248	23
180°	247	247	247	247	247	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5
2.5°	422.5	422.5	425.3	426.6	429.4	430.7	433.5	436.2	444.3	445.7	448.4
5°	411.7	417.2	434.8	441.6	460.6	486.5	497.3	515.0	551.7	562.5	569.3
7.5°	395.4	407.6	451.1	462.0	509.5	577.4	606.0	644.1	702.5	731.0	754.1
10°	369.5	395.4	472.8	498.7	576.1	679.3	732.3	785.3	873.7	913.1	928.0
12.5°	341.0	383.2	495.9	531.3	642.7	793.5	857.4	915.8	1016.4	1069.4	1077.5
15°	308.4	365.5	517.7	569.3	713.3	888.6	959.3	1031.3	1125.1	1163.1	1172.6
17.5°	279.9	352.0	538.1	592.5	767.7	974.2	1046.2	1106.1	1182.1	1208.0	1214.7
20°	244.6	330.2	551.7	622.3	824.8	1036.8	1106.1	1152.2	1203.9	1220.2	1222.9
22.5°	218.7	307.1	559.8	633.2	862.8	1074.7	1133.2	1169.9	1205.2	1210.7	1212.0
25°	197.1	281.3	558.5	645.4	895.4	1097.9	1142.7	1169.9	1190.3	1193.0	1193.0
27.5°	176.7	252.7	553.0	648.1	919.8	1103.3	1138.7	1157.7	1167.2	1172.6	1172.6
30°	159.0	225.6	539.5	642.7	930.8	1097.9	1126.4	1135.9	1145.4	1153.6	1157.7
32.5°	145.4	199.7	519.1	631.8	932.1	1084.3	1104.7	1110.1	1123.7	1142.7	1149.5
35°	133.1	173.9	495.9	616.9	923.9	1062.5	1076.1	1081.6	1108.7	1137.3	1146.8
37.5°	120.9	154.9	466.1	591.1	911.7	1036.8	1046.2	1055.8	1097.9	1131.8	1142.7
40°	108.7	138.6	430.7	562.5	892.7	1005.4	1013.6	1028.6	1084.3	1123.7	1134.6
42.5°	99.2	125.0	392.7	532.6	868.2	970.2	982.4	1004.2	1068.0	1110.1	1122.4
45°	91.1	111.5	352.0	491.8	837.0	933.5	951.2	981.0	1049.0	1089.8	1100.6
47.5°	82.9	101.9	309.8	449.8	803.0	896.8	919.8	953.9	1023.1	1062.5	1072.1
50°	76.1	92.4	267.6	404.9	766.3	857.4	884.6	919.8	990.5	1027.2	1039.5
52.5°	70.7	84.2	228.3	360.1	724.2	816.6	847.9	884.6	951.2	986.5	994.6
55°	65.2	77.4	194.3	312.5	680.7	773.1	807.1	842.4	907.6	937.5	943.0
57.5°	62.5	72.0	165.7	267.6	634.5	724.2	762.3	794.9	856.0	879.1	884.6
60°	58.5	67.9	144.1	229.7	584.3	678.1	710.7	743.3	794.9	813.9	817.9
62.5°	54.4	65.2	127.8	193.0	532.6	623.7	656.3	686.2	729.7	743.3	748.6
65°	51.6	62.5	115.5	165.7	479.6	566.6	599.2	625.1	660.4	674.0	676.7
67.5°	48.9	59.8	106.0	142.7	426.6	509.5	534.0	558.5	585.6	599.2	600.6
70°	44.8	57.1	97.8	126.4	372.3	444.3	464.7	490.5	512.2	519.1	523.2
72.5°	42.2	53.0	92.4	114.1	316.6	381.8	400.9	415.8	434.8	441.6	441.6
75°	38.1	47.5	87.0	101.9	259.5	312.5	328.8	343.8	358.7	361.4	357.3
77.5°	34.0	42.2	74.8	85.6	202.4	247.3	260.9	269.0	281.3	283.9	285.3
80°	28.5	36.7	58.5	66.6	146.7	182.0	191.6	198.3	209.3	209.3	212.0
82.5°	21.8	28.5	42.2	47.5	99.2	125.0	133.1	137.2	144.1	144.1	144.1
85°	13.6	17.7	27.1	31.2	59.8	76.1	81.5	82.9	88.3	89.7	89.7
87.5°	6.8	9.5	17.7	19.0	31.2	39.4	39.4	42.2	42.2	40.8	39.4
90°	1.7	3.0	4.3	4.7	7.3	10.8	12.6	11.2	8.4	6.3	6.3
92.5°	6.6	17.8	29.1	32.0	44.9	62.2	70.8	62.1	44.6	31.5	30.2
95°	15.9	36.5	57.1	62.2	110.5	174.8	207.0	184.7	140.1	106.7	102.9
97.5°	27.5	45.6	63.8	68.3	148.8	256.2	309.8	295.7	267.6	246.4	239.2
100°	36.4	52.8	69.4	73.5	162.8	281.9	341.4	342.5	344.6	346.1	337.5
102.5°	44.0	59.4	74.8	78.6	169.2	290.0	350.3	368.3	404.2	431.1	423.7
105°	56.9	69.9	82.9	86.2	173.9	290.9	349.4	389.6	470.1	530.5	526.5
107.5°	70.2	82.3	94.4	97.5	174.8	278.0	329.6	385.7	497.9	582.1	583.1
110°	79.1	90.0	101.0	103.7	173.5	266.5	313.0	375.7	501.2	595.3	599.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	87.8	98.3	108.7	111.4	173.5	256.5	297.9	362.2	490.6	586.9	593.3
115°	101.1	110.7	120.4	122.8	175.1	244.9	279.8	341.7	465.4	558.2	567.0
117.5°	114.2	122.9	131.7	133.9	178.4	237.8	267.5	323.3	434.9	518.7	528.4
120°	121.8	130.1	138.3	140.4	181.1	235.4	262.5	313.5	415.6	492.1	501.6
122.5°	129.3	137.6	145.9	148.0	184.9	234.1	258.6	304.6	396.5	465.4	474.7
125°	140.7	148.2	155.8	157.7	190.0	233.0	254.6	293.6	371.6	430.2	438.8
127.5°	149.9	157.6	165.3	167.2	195.1	232.5	251.1	284.6	351.6	401.8	409.0
130°	154.9	163.2	171.4	173.4	198.9	232.8	249.7	279.6	339.3	384.0	390.7
132.5°	160.0	168.3	176.5	178.6	202.0	233.0	248.6	275.3	328.7	368.7	374.8
135°	167.7	175.1	182.7	184.5	205.2	232.8	246.6	268.9	313.7	347.2	352.4
137.5°	175.5	182.8	190.3	192.2	210.2	234.2	246.3	265.2	303.0	331.3	335.6
140°	181.9	188.7	195.6	197.3	213.2	234.5	245.1	261.5	294.1	318.6	322.6
142.5°	186.9	193.2	199.5	201.1	215.8	235.3	245.1	259.4	288.1	309.6	313.0
145°	194.5	199.9	205.5	206.9	219.1	235.4	243.5	255.2	278.6	296.2	298.8
147.5°	202.1	207.5	212.8	214.2	224.0	237.0	243.5	252.7	271.2	285.0	287.2
150°	207.0	211.8	216.7	217.9	226.4	237.8	243.5	251.3	266.8	278.6	280.3
152.5°	212.2	215.8	219.5	220.4	228.1	238.3	243.5	250.1	263.5	273.4	274.7
155°	219.8	222.5	225.2	225.9	231.7	239.5	243.5	248.8	259.4	267.3	268.2
157.5°	225.4	228.1	230.7	231.3	235.4	240.7	243.5	247.6	255.8	262.0	262.7
160°	229.3	231.3	233.4	233.8	237.0	241.3	243.5	247.0	254.1	259.4	259.7
162.5°	233.0	234.6	236.1	236.5	238.8	241.9	243.5	246.4	252.4	256.9	257.2
165°	237.2	238.6	240.0	240.3	241.4	242.7	243.5	245.6	249.8	253.0	253.3
167.5°	241.0	241.6	242.3	242.4	243.3	244.5	245.1	246.5	249.3	251.4	251.6
170°	243.5	244.1	244.8	244.9	245.0	245.1	245.1	246.5	249.3	251.4	251.4
172.5°	244.8	244.9	245.1	245.1	245.1	245.1	245.1	246.2	248.4	250.1	249.9
175°	246.6	246.6	246.6	246.6	246.1	245.4	245.1	245.8	247.2	248.3	248.3
177.5°	246.6	246.6	246.6	246.6	246.2	245.7	245.5	246.0	247.2	248.0	247.8
180°	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6	246.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	422.5	422.5
2.5°	451.1	448.4
5°	580.2	582.9
7.5°	781.3	780.0
10°	971.5	983.8
12.5°	1110.1	1112.8
15°	1194.4	1199.8
17.5°	1227.0	1228.3
20°	1228.3	1225.6
22.5°	1213.3	1210.7
25°	1195.7	1194.4
27.5°	1179.4	1180.7
30°	1172.6	1176.7
32.5°	1172.6	1179.4
35°	1175.4	1182.1
37.5°	1174.0	1182.1
40°	1168.5	1178.0
42.5°	1153.6	1160.3
45°	1130.5	1138.7
47.5°	1100.6	1106.1
50°	1062.5	1068.0
52.5°	1015.0	1016.4
55°	957.9	963.4
57.5°	896.8	898.2
60°	828.9	833.0
62.5°	756.8	756.8
65°	680.7	683.4
67.5°	601.9	608.8
70°	521.8	523.2
72.5°	442.9	442.9
75°	361.4	362.8
77.5°	283.9	283.9
80°	210.6	212.0
82.5°	145.4	148.1
85°	91.1	91.1
87.5°	42.2	38.1
90°	6.3	6.3
92.5°	25.2	20.2
95°	87.8	72.7
97.5°	210.4	181.6
100°	303.1	268.8
102.5°	394.4	365.0
105°	510.7	494.9
107.5°	586.8	590.7
110°	615.9	632.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	618.6	643.8
115°	602.1	637.2
117.5°	567.3	606.3
120°	539.3	577.1
122.5°	512.1	549.3
125°	473.0	507.4
127.5°	438.0	467.0
130°	417.5	444.2
132.5°	398.7	422.7
135°	373.1	393.7
137.5°	352.4	369.4
140°	338.4	354.2
142.5°	326.7	340.3
145°	309.2	319.4
147.5°	295.7	304.2
150°	287.2	294.1
152.5°	279.9	285.1
155°	271.7	275.1
157.5°	265.1	267.5
160°	261.1	262.5
162.5°	258.6	259.9
165°	254.8	256.2
167.5°	252.1	252.7
170°	251.4	251.4
172.5°	249.4	248.9
175°	248.3	248.3
177.5°	247.2	246.6
180°	246.6	246.6



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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	7.16	8.26	7.95	9.07	10.07	20.30	21.40	21.09	22.22	23.22
	3H	7.89	8.88	8.69	9.70	10.73	22.15	23.13	22.94	23.96	24.99
	4H	8.20	9.13	9.01	9.96	11.00	22.79	23.73	23.61	24.56	25.60
	6H	8.46	9.33	9.29	10.17	11.22	23.22	24.09	24.05	24.93	25.98
	8H	8.54	9.36	9.37	10.22	11.27	23.34	24.17	24.18	25.03	26.08
	12H	8.56	9.35	9.41	10.20	11.28	23.41	24.20	24.26	25.05	26.13
4H	2H	14.38	15.32	15.20	16.15	17.19	20.61	21.54	21.43	22.38	23.41
	3H	15.97	16.76	16.81	17.63	18.68	22.66	23.44	23.49	24.31	25.37
	4H	16.08	16.80	16.93	17.66	18.74	23.43	24.14	24.27	25.01	26.09
	6H	16.11	16.73	16.97	17.62	18.70	23.97	24.59	24.83	25.48	26.56
	8H	16.09	16.67	16.95	17.55	18.65	24.13	24.71	24.99	25.59	26.69
	12H	16.06	16.58	16.94	17.49	18.59	24.23	24.75	25.11	25.65	26.76
8H	4H	17.54	18.12	18.40	19.00	20.10	23.51	24.09	24.37	24.97	26.07
	6H	17.79	18.27	18.68	19.20	20.30	24.14	24.62	25.03	25.54	26.64
	8H	17.81	18.24	18.71	19.16	20.27	24.35	24.78	25.26	25.70	26.81
	12H	17.79	18.17	18.70	19.08	20.25	24.50	24.88	25.41	25.79	26.96
12H	4H	17.69	18.21	18.57	19.11	20.22	23.47	24.00	24.36	24.90	26.01
	6H	18.05	18.48	18.95	19.39	20.51	24.12	24.55	25.03	25.47	26.59
	8H	18.13	18.51	19.04	19.42	20.58	24.36	24.74	25.26	25.64	26.81