

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: P936771

Luminaire Tested: SQ4-FB-050U-075D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936771
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

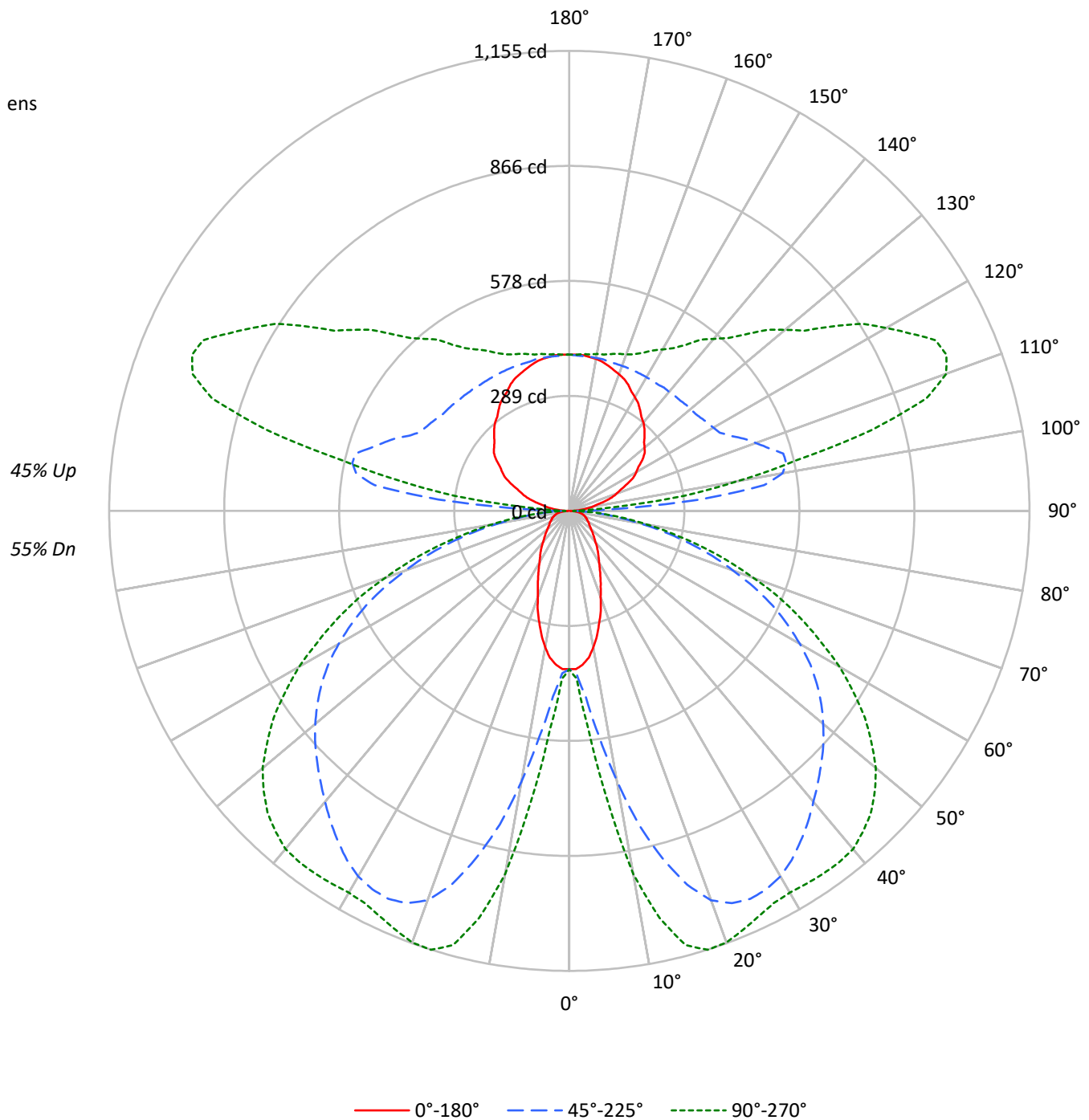
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5620.6 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 54.6
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2459	2459	2459
5°	2401	2841	3305
10°	2177	4140	5479
15°	1850	5408	6617
20°	1505	6266	6743
25°	1255	6556	6606
30°	1058	6595	6593
35°	935	6484	6764
40°	814	6339	6940
45°	737	6233	6967
50°	676	6137	6852
55°	646	5998	6548
60°	661	5732	6068
65°	687	5329	5409
70°	730	4644	4570
75°	806	3783	3566
80°	872	2621	2403
85°	763	1388	1230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6967 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	0.9
10°-20°	227.9	4.1
20°-30°	398.6	7.1
30°-40°	513.1	9.1
40°-50°	573.1	10.2
50°-60°	548.9	9.8
60°-70°	435.0	7.7
70°-80°	255.8	4.6
80°-90°	72.6	1.3
90°-100°	191.3	3.4
100°-110°	503.0	8.9
110°-120°	521.5	9.3
120°-130°	418.3	7.4
130°-140°	328.2	5.8
140°-150°	251.9	4.5
150°-160°	181.4	3.2
160°-170°	111.0	2.0
170°-180°	37.5	0.7
0°-30°	677.9	12.1
0°-40°	1191.0	21.2
0°-60°	2313.0	41.2
0°-90°	3076.3	54.7
90°-120°	1215.8	21.6
90°-150°	2214.3	39.4
90°-180°	2544.0	45.3
0°-180°	5620.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	387	415	468	529	548	36
15°	290	536	902	1094	1129	81
25°	185	607	1075	1122	1123	85
35°	125	580	1012	1070	1112	78
45°	86	463	895	1025	1071	66
55°	61	294	759	882	906	56
65°	49	156	564	634	643	48
75°	36	96	309	340	341	37
85°	13	29	77	84	86	14
90°	3	7	20	10	10	3
95°	25	99	330	170	116	28
105°	91	137	556	844	788	96
115°	161	195	445	888	1014	159
125°	224	251	405	685	808	199
135°	267	294	392	553	627	206
145°	310	329	388	472	508	194
155°	350	360	388	425	438	161
165°	377	382	388	403	408	107
175°	392	392	390	395	395	37
180°	392	392	392	392	392	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5
2.5°	397.5	397.5	400.0	401.3	403.8	405.1	407.7	410.2	417.9	419.2	421.7
5°	387.2	392.3	409.0	415.4	433.2	457.5	467.7	484.4	518.9	529.1	535.5
7.5°	371.9	383.4	424.3	434.5	479.2	543.2	570.0	605.8	660.7	687.6	709.3
10°	347.6	371.9	444.7	469.0	541.9	639.0	688.8	738.7	821.8	858.8	872.9
12.5°	320.8	360.4	466.5	499.7	604.5	746.4	806.4	861.4	955.9	1005.9	1013.5
15°	290.1	343.8	486.9	535.5	670.9	835.8	902.3	970.1	1058.3	1094.1	1103.0
17.5°	263.3	331.0	506.1	557.2	722.1	916.3	984.1	1040.4	1111.9	1136.2	1142.6
20°	230.0	310.6	518.9	585.3	775.7	975.2	1040.4	1083.8	1132.4	1147.7	1150.3
22.5°	205.8	288.8	526.5	595.5	811.5	1011.0	1065.9	1100.4	1133.7	1138.8	1140.1
25°	185.3	264.5	525.3	607.0	842.2	1032.7	1074.9	1100.4	1119.6	1122.2	1122.2
27.5°	166.1	237.7	520.1	609.6	865.2	1037.8	1071.0	1088.9	1097.9	1103.0	1103.0
30°	149.5	212.1	507.4	604.5	875.4	1032.7	1059.5	1068.5	1077.4	1085.1	1088.9
32.5°	136.7	187.9	488.2	594.3	876.7	1019.9	1039.1	1044.2	1057.0	1074.9	1081.3
35°	125.2	163.6	466.5	580.2	869.0	999.5	1012.3	1017.4	1042.9	1069.8	1078.7
37.5°	113.7	145.7	438.4	555.9	857.5	975.2	984.1	993.1	1032.7	1064.7	1074.9
40°	102.2	130.4	405.1	529.1	839.6	945.7	953.4	967.4	1019.9	1057.0	1067.2
42.5°	93.3	117.6	369.3	501.0	816.6	912.5	924.0	944.4	1004.6	1044.2	1055.7
45°	85.6	104.8	331.0	462.6	787.2	878.0	894.6	922.7	986.7	1025.0	1035.3
47.5°	78.0	95.8	291.4	423.0	755.3	843.5	865.2	897.2	962.3	999.5	1008.4
50°	71.6	86.9	251.8	380.8	720.8	806.4	832.0	865.2	931.7	966.2	977.8
52.5°	66.5	79.2	214.7	338.7	681.2	768.1	797.5	832.0	894.6	927.8	935.5
55°	61.3	72.8	182.8	293.9	640.3	727.2	759.1	792.4	853.7	881.8	886.9
57.5°	58.8	67.7	155.9	251.8	596.8	681.2	717.0	747.6	805.1	826.9	832.0
60°	55.0	63.9	135.5	216.0	549.5	637.7	668.4	699.1	747.6	765.5	769.4
62.5°	51.1	61.3	120.1	181.5	501.0	586.6	617.3	645.4	686.3	699.1	704.2
65°	48.6	58.8	108.6	155.9	451.1	532.9	563.6	587.9	621.1	633.9	636.4
67.5°	46.0	56.2	99.7	134.2	401.3	479.2	502.3	525.3	550.8	563.6	564.9
70°	42.2	53.7	92.0	118.9	350.2	417.9	437.1	461.4	481.8	488.2	492.0
72.5°	39.6	49.8	86.9	107.4	297.8	359.1	377.0	391.1	409.0	415.4	415.4
75°	35.8	44.7	81.8	95.8	244.1	293.9	309.3	323.3	337.4	339.9	336.1
77.5°	32.0	39.6	70.3	80.5	190.4	232.6	245.4	253.0	264.5	267.1	268.4
80°	26.8	34.5	55.0	62.6	138.0	171.3	180.2	186.6	196.8	196.8	199.4
82.5°	20.4	26.8	39.6	44.7	93.3	117.6	125.2	129.1	135.5	135.5	135.5
85°	12.8	16.6	25.6	29.4	56.2	71.6	76.7	78.0	83.1	84.3	84.3
87.5°	6.4	8.9	16.6	17.9	29.4	37.1	37.1	39.6	39.6	38.3	37.1
90°	2.6	4.8	6.9	7.4	11.6	17.2	20.0	17.8	13.3	10.0	10.0
92.5°	10.6	28.5	46.3	50.9	71.5	99.0	112.7	98.7	70.9	50.0	48.1
95°	25.3	58.0	90.8	99.0	175.9	278.3	329.6	294.1	223.1	169.9	163.8
97.5°	43.7	72.7	101.6	108.8	236.9	407.8	493.1	470.7	425.8	392.2	380.7
100°	57.9	84.2	110.4	117.0	259.1	448.7	543.4	545.0	548.3	550.8	537.2
102.5°	70.0	94.6	119.0	125.2	269.3	461.5	557.6	586.2	643.3	686.2	674.5
105°	90.7	111.4	132.1	137.3	276.8	463.0	556.0	620.1	748.1	844.2	837.9
107.5°	111.7	131.0	150.3	155.1	278.3	442.4	524.4	613.7	792.4	926.4	927.9
110°	125.9	143.3	160.8	165.1	276.1	424.1	498.1	597.9	797.7	947.5	954.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	139.9	156.5	173.1	177.3	276.2	408.2	474.1	576.4	780.8	934.0	944.1
115°	160.9	176.3	191.6	195.4	278.8	389.9	445.4	543.9	740.8	888.5	902.4
117.5°	181.7	195.7	209.6	213.1	284.0	378.5	425.7	514.5	692.2	825.5	841.0
120°	193.8	207.0	220.1	223.4	288.1	374.5	417.7	498.9	661.3	783.1	798.2
122.5°	205.8	219.0	232.2	235.5	294.2	372.5	411.7	484.8	631.1	740.7	755.6
125°	223.9	235.9	248.0	251.0	302.4	370.9	405.1	467.2	591.5	684.6	698.2
127.5°	238.6	250.8	263.0	266.1	310.6	369.9	399.6	452.9	559.5	639.5	651.0
130°	246.6	259.7	272.8	276.0	316.5	370.4	397.5	444.9	539.9	611.1	621.8
132.5°	254.7	267.9	281.0	284.2	321.4	370.9	395.7	438.2	523.1	586.9	596.4
135°	266.8	278.8	290.7	293.7	326.7	370.5	392.5	428.1	499.3	552.6	560.9
137.5°	279.2	291.0	302.8	305.8	334.5	372.8	391.9	422.0	482.1	527.3	534.0
140°	289.5	300.4	311.2	314.0	339.4	373.2	390.1	416.1	468.1	507.0	513.3
142.5°	297.3	307.4	317.5	320.0	343.4	374.5	390.1	413.0	458.5	492.8	498.2
145°	309.5	318.3	327.1	329.3	348.7	374.5	387.5	406.1	443.5	471.5	475.6
147.5°	321.6	330.2	338.8	340.9	356.4	377.1	387.5	402.1	431.5	453.6	457.0
150°	329.6	337.3	345.0	346.9	360.5	378.5	387.5	399.9	424.7	443.3	446.0
152.5°	337.6	343.5	349.4	350.9	363.0	379.3	387.5	398.1	419.3	435.1	437.2
155°	349.8	354.2	358.4	359.5	368.8	381.3	387.5	395.9	412.8	425.4	426.8
157.5°	358.8	363.0	367.2	368.2	374.6	383.2	387.5	394.0	407.2	417.0	417.9
160°	364.8	368.1	371.3	372.2	377.3	384.1	387.5	393.1	404.4	412.8	413.3
162.5°	370.9	373.3	375.8	376.4	380.1	385.0	387.5	392.3	401.7	408.8	409.3
165°	377.4	379.7	381.9	382.5	384.2	386.4	387.5	390.9	397.6	402.7	403.3
167.5°	383.5	384.5	385.6	385.9	387.3	389.2	390.1	392.3	396.8	400.1	400.4
170°	387.5	388.5	389.6	389.9	390.0	390.0	390.1	392.3	396.8	400.1	400.1
172.5°	389.6	389.9	390.0	390.1	390.1	390.1	390.1	391.8	395.3	398.0	397.8
175°	392.5	392.5	392.5	392.5	391.7	390.6	390.1	391.2	393.5	395.1	395.1
177.5°	392.5	392.5	392.5	392.5	391.9	391.1	390.6	391.5	393.3	394.6	394.3
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	397.5	397.5
2.5°	424.3	421.7
5°	545.7	548.3
7.5°	734.8	733.6
10°	913.8	925.3
12.5°	1044.2	1046.8
15°	1123.4	1128.6
17.5°	1154.1	1155.4
20°	1155.4	1152.8
22.5°	1141.3	1138.8
25°	1124.7	1123.4
27.5°	1109.4	1110.7
30°	1103.0	1106.8
32.5°	1103.0	1109.4
35°	1105.6	1111.9
37.5°	1104.3	1111.9
40°	1099.2	1108.1
42.5°	1085.1	1091.5
45°	1063.4	1071.0
47.5°	1035.3	1040.4
50°	999.5	1004.6
52.5°	954.7	955.9
55°	901.0	906.1
57.5°	843.5	844.8
60°	779.6	783.4
62.5°	711.8	711.8
65°	640.3	642.8
67.5°	566.2	572.5
70°	490.8	492.0
72.5°	416.6	416.6
75°	339.9	341.2
77.5°	267.1	267.1
80°	198.1	199.4
82.5°	136.7	139.3
85°	85.6	85.6
87.5°	39.6	35.8
90°	10.0	10.0
92.5°	40.0	32.1
95°	139.7	115.6
97.5°	334.8	289.0
100°	482.5	427.8
102.5°	627.7	580.8
105°	812.8	787.6
107.5°	934.0	940.1
110°	980.2	1006.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	984.4	1024.6
115°	958.2	1014.1
117.5°	902.9	964.9
120°	858.3	918.5
122.5°	814.9	874.2
125°	752.9	807.6
127.5°	697.2	743.4
130°	664.4	707.0
132.5°	634.6	672.7
135°	593.8	626.6
137.5°	561.0	588.0
140°	538.5	563.7
142.5°	519.9	541.5
145°	492.0	508.4
147.5°	470.6	484.1
150°	457.1	468.1
152.5°	445.5	453.9
155°	432.3	437.8
157.5°	421.8	425.7
160°	415.5	417.7
162.5°	411.4	413.6
165°	405.6	407.8
167.5°	401.3	402.2
170°	400.1	400.1
172.5°	396.9	396.2
175°	395.1	395.1
177.5°	393.5	392.5
180°	392.5	392.5



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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	4.55	5.49	5.45	6.43	7.63	17.71	18.66	18.62	19.59	20.79
	3H	5.26	6.11	6.18	7.05	8.28	19.55	20.41	20.47	21.35	22.57
	4H	5.56	6.37	6.49	7.32	8.55	20.20	21.01	21.13	21.95	23.18
	6H	5.82	6.56	6.76	7.51	8.76	20.63	21.38	21.58	22.33	23.57
	8H	5.89	6.60	6.84	7.57	8.81	20.75	21.46	21.70	22.43	23.68
	12H	5.91	6.58	6.87	7.55	8.82	20.82	21.50	21.78	22.46	23.73
4H	2H	11.76	12.57	12.70	13.52	14.75	18.00	18.81	18.94	19.75	20.98
	3H	13.34	14.02	14.29	14.99	16.24	20.05	20.72	21.00	21.70	22.95
	4H	13.44	14.06	14.40	15.03	16.30	20.81	21.43	21.77	22.40	23.67
	6H	13.46	13.99	14.43	14.99	16.25	21.35	21.89	22.33	22.88	24.15
	8H	13.44	13.94	14.41	14.92	16.21	21.52	22.02	22.49	23.00	24.29
	12H	13.40	13.85	14.39	14.85	16.14	21.61	22.06	22.61	23.07	24.36
8H	4H	14.89	15.39	15.86	16.38	17.66	20.88	21.38	21.86	22.37	23.65
	6H	15.13	15.55	16.14	16.58	17.86	21.51	21.93	22.51	22.96	24.24
	8H	15.15	15.52	16.16	16.54	17.84	21.73	22.10	22.74	23.11	24.41
	12H	15.13	15.45	16.14	16.46	17.81	21.88	22.20	22.89	23.21	24.56
12H	4H	15.04	15.49	16.03	16.49	17.78	20.84	21.29	21.83	22.30	23.59
	6H	15.39	15.76	16.40	16.78	18.08	21.50	21.86	22.50	22.88	24.18
	8H	15.47	15.79	16.48	16.80	18.15	21.73	22.05	22.74	23.06	24.41