

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: P936738

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936738
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-92765-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

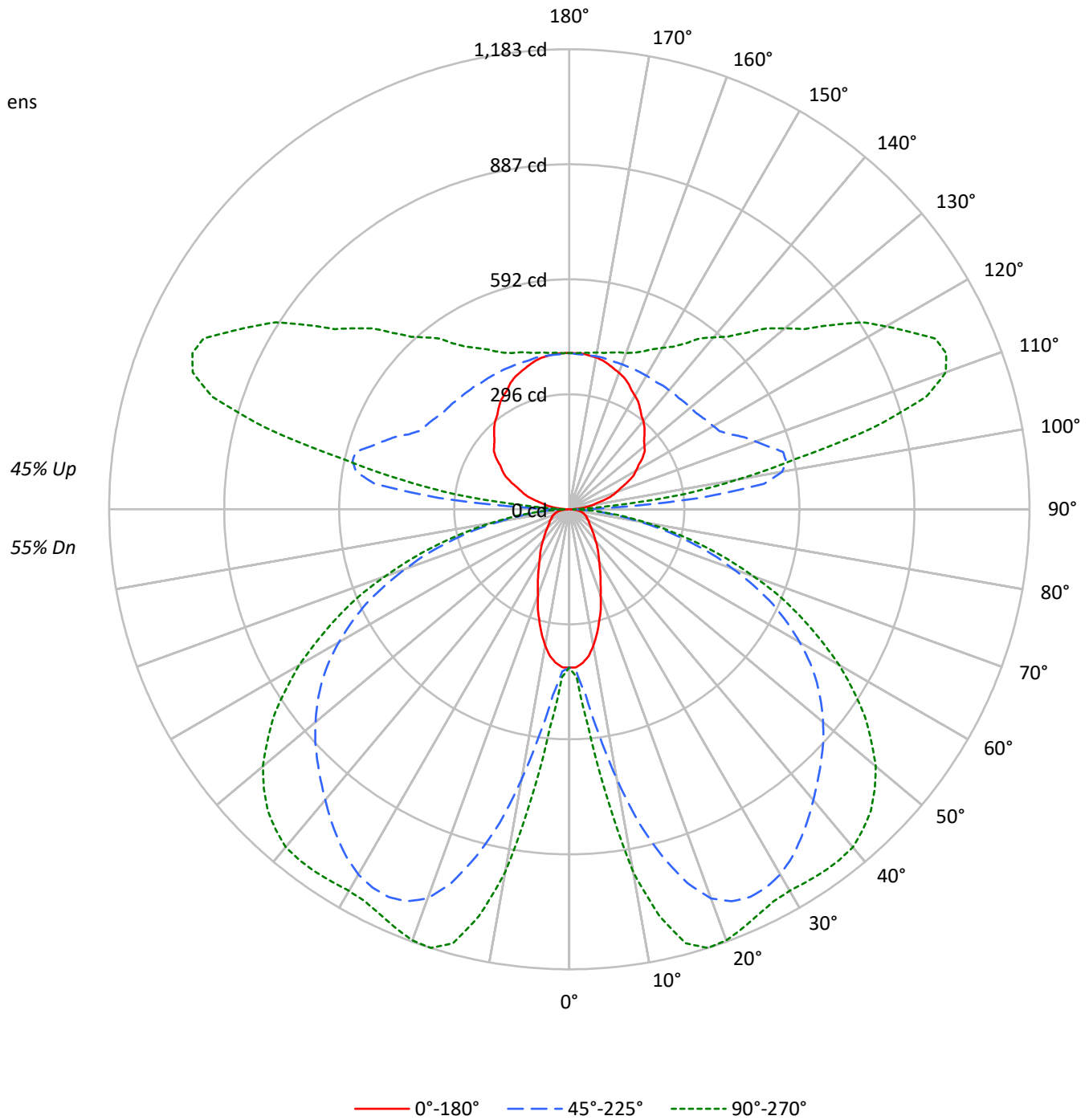
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5752.7 lumens
Efficiency: N/A
Efficacy: 105.4 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

TEST NUMBER: P936738
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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°	2517	2517	2517
5°	2457	2908	3383
10°	2228	4238	5608
15°	1893	5535	6772
20°	1540	6413	6901
25°	1285	6710	6762
30°	1082	6751	6749
35°	957	6637	6923
40°	833	6488	7104
45°	754	6379	7131
50°	692	6281	7013
55°	662	6139	6702
60°	676	5867	6211
65°	702	5455	5536
70°	747	4754	4677
75°	824	3872	3650
80°	895	2682	2460
85°	781	1421	1258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7131 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	0.9
10°-20°	233.2	4.1
20°-30°	408.0	7.1
30°-40°	525.2	9.1
40°-50°	586.6	10.2
50°-60°	561.8	9.8
60°-70°	445.2	7.7
70°-80°	261.8	4.6
80°-90°	74.3	1.3
90°-100°	195.8	3.4
100°-110°	514.8	8.9
110°-120°	533.8	9.3
120°-130°	428.2	7.4
130°-140°	336.0	5.8
140°-150°	257.9	4.5
150°-160°	185.7	3.2
160°-170°	113.6	2.0
170°-180°	38.4	0.7
0°-30°	693.8	12.1
0°-40°	1219.0	21.2
0°-60°	2367.4	41.2
0°-90°	3148.6	54.7
90°-120°	1244.4	21.6
90°-150°	2266.4	39.4
90°-180°	2604.0	45.3
0°-180°	5752.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	396	425	479	542	561	37
15°	297	548	924	1120	1155	83
25°	190	621	1100	1149	1150	87
35°	128	594	1036	1095	1138	80
45°	88	474	916	1049	1096	68
55°	63	301	777	903	927	57
65°	50	160	577	649	658	49
75°	37	98	316	348	349	38
85°	13	30	78	86	88	14
90°	3	8	20	10	10	3
95°	26	101	337	174	118	29
105°	93	140	569	864	806	98
115°	165	200	456	909	1038	163
125°	229	257	415	701	827	203
135°	273	301	402	566	641	211
145°	317	337	397	483	520	198
155°	358	368	397	435	448	165
165°	386	392	397	412	417	109
175°	402	402	399	404	404	38
180°	402	402	402	402	402	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8
2.5°	406.8	406.8	409.4	410.7	413.3	414.7	417.3	419.9	427.7	429.0	431.7
5°	396.3	401.6	418.6	425.1	443.4	468.3	478.7	495.8	531.1	541.5	548.1
7.5°	380.6	392.4	434.3	444.7	490.5	555.9	583.4	620.0	676.3	703.7	726.0
10°	355.8	380.6	455.2	480.1	554.6	654.0	705.0	756.1	841.1	879.0	893.4
12.5°	328.3	368.9	477.4	511.4	618.7	763.9	825.4	881.6	978.4	1029.5	1037.4
15°	296.9	351.9	498.4	548.1	686.7	855.5	923.5	992.9	1083.2	1119.8	1128.9
17.5°	269.5	338.8	518.0	570.3	739.0	937.9	1007.3	1064.8	1138.1	1162.9	1169.5
20°	235.4	317.9	531.1	599.1	794.0	998.1	1064.8	1109.3	1159.0	1174.7	1177.3
22.5°	210.6	295.6	538.9	609.6	830.6	1034.8	1091.0	1126.3	1160.3	1165.6	1166.9
25°	189.7	270.8	537.6	621.3	862.0	1057.0	1100.2	1126.3	1145.9	1148.6	1148.6
27.5°	170.0	243.3	532.4	623.9	885.6	1062.2	1096.2	1114.5	1123.7	1128.9	1128.9
30°	153.0	217.1	519.3	618.7	896.0	1057.0	1084.5	1093.6	1102.8	1110.6	1114.5
32.5°	140.0	192.3	499.7	608.2	897.3	1043.9	1063.5	1068.8	1081.8	1100.2	1106.7
35°	128.2	167.4	477.4	593.9	889.5	1023.0	1036.1	1041.3	1067.5	1094.9	1104.1
37.5°	116.4	149.1	448.7	569.0	877.7	998.1	1007.3	1016.4	1057.0	1089.7	1100.2
40°	104.6	133.4	414.7	541.5	859.4	968.0	975.8	990.2	1043.9	1081.8	1092.3
42.5°	95.5	120.3	378.0	512.8	835.8	933.9	945.7	966.6	1028.2	1068.8	1080.5
45°	87.6	107.3	338.8	473.5	805.8	898.6	915.6	944.4	1009.9	1049.1	1059.6
47.5°	79.8	98.1	298.2	433.0	773.1	863.3	885.6	918.3	985.0	1023.0	1032.1
50°	73.3	88.9	257.7	389.8	737.7	825.4	851.5	885.6	953.6	988.9	1000.7
52.5°	68.0	81.1	219.8	346.6	697.2	786.1	816.2	851.5	915.6	949.6	957.5
55°	62.8	74.6	187.1	300.9	655.3	744.3	777.0	811.0	873.8	902.6	907.8
57.5°	60.2	69.3	159.6	257.7	610.9	697.2	733.8	765.2	824.1	846.3	851.5
60°	56.2	65.4	138.7	221.1	562.5	652.7	684.1	715.5	765.2	783.5	787.4
62.5°	52.3	62.8	123.0	185.7	512.8	600.4	631.8	660.6	702.4	715.5	720.7
65°	49.7	60.2	111.2	159.6	461.7	545.5	576.9	601.7	635.7	648.8	651.4
67.5°	47.1	57.6	102.0	137.3	410.7	490.5	514.1	537.6	563.8	576.9	578.2
70°	43.2	54.9	94.2	121.6	358.4	427.7	447.4	472.2	493.1	499.7	503.6
72.5°	40.5	51.0	88.9	109.9	304.8	367.6	385.9	400.3	418.6	425.1	425.1
75°	36.6	45.8	83.7	98.1	249.8	300.9	316.5	330.9	345.3	347.9	344.0
77.5°	32.7	40.5	71.9	82.4	194.9	238.1	251.1	259.0	270.8	273.4	274.7
80°	27.5	35.3	56.2	64.1	141.3	175.3	184.4	191.0	201.4	201.4	204.1
82.5°	20.9	27.5	40.5	45.8	95.5	120.3	128.2	132.1	138.7	138.7	138.7
85°	13.1	17.0	26.2	30.1	57.6	73.3	78.5	79.8	85.0	86.3	86.3
87.5°	6.5	9.2	17.0	18.3	30.1	37.9	37.9	40.5	40.5	39.2	37.9
90°	2.7	4.9	7.1	7.6	11.9	17.6	20.5	18.2	13.6	10.2	10.2
92.5°	10.8	29.1	47.4	52.1	73.2	101.3	115.4	101.1	72.6	51.2	49.2
95°	25.9	59.4	93.0	101.3	180.0	284.9	337.3	301.0	228.4	173.9	167.7
97.5°	44.7	74.4	103.9	111.4	242.5	417.4	504.7	481.8	435.8	401.4	389.6
100°	59.3	86.2	113.0	119.7	265.2	459.2	556.2	557.8	561.2	563.8	549.8
102.5°	71.7	96.8	121.8	128.1	275.6	472.4	570.7	600.0	658.5	702.3	690.4
105°	92.8	114.0	135.2	140.5	283.3	473.9	569.1	634.7	765.7	864.1	857.6
107.5°	114.3	134.1	153.8	158.8	284.8	452.8	536.7	628.1	811.0	948.2	949.7
110°	128.9	146.7	164.6	169.0	282.6	434.1	509.8	612.0	816.5	969.8	976.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	143.2	160.2	177.2	181.5	282.7	417.8	485.3	589.9	799.1	956.0	966.3
115°	164.7	180.4	196.1	200.0	285.3	399.0	455.9	556.7	758.2	909.4	923.7
117.5°	186.0	200.3	214.5	218.1	290.6	387.4	435.7	526.6	708.5	844.9	860.8
120°	198.4	211.8	225.2	228.6	294.9	383.3	427.6	510.7	676.9	801.5	816.9
122.5°	210.6	224.1	237.6	241.0	301.1	381.3	421.4	496.2	645.9	758.1	773.3
125°	229.2	241.5	253.8	256.9	309.5	379.6	414.7	478.2	605.4	700.7	714.6
127.5°	244.3	256.7	269.2	272.3	317.9	378.6	409.0	463.6	572.7	654.5	666.3
130°	252.4	265.8	279.2	282.5	324.0	379.2	406.8	455.4	552.6	625.5	636.4
132.5°	260.7	274.2	287.6	290.9	328.9	379.6	405.0	448.5	535.4	600.7	610.4
135°	273.1	285.3	297.5	300.6	334.3	379.2	401.7	438.2	511.0	565.6	574.1
137.5°	285.8	297.9	309.9	313.0	342.4	381.5	401.1	431.9	493.5	539.7	546.6
140°	296.3	307.5	318.6	321.3	347.3	382.0	399.3	425.9	479.1	518.9	525.4
142.5°	304.3	314.6	324.9	327.5	351.4	383.3	399.3	422.7	469.3	504.4	510.0
145°	316.8	325.8	334.8	337.0	356.9	383.3	396.6	415.7	453.9	482.6	486.8
147.5°	329.2	337.9	346.7	348.9	364.8	386.0	396.6	411.6	441.7	464.3	467.8
150°	337.3	345.2	353.1	355.1	369.0	387.4	396.6	409.3	434.7	453.7	456.5
152.5°	345.6	351.6	357.6	359.1	371.6	388.2	396.6	407.4	429.1	445.3	447.4
155°	358.1	362.5	366.9	368.0	377.5	390.2	396.6	405.2	422.5	435.4	436.8
157.5°	367.2	371.5	375.8	376.9	383.4	392.2	396.6	403.3	416.7	426.8	427.7
160°	373.4	376.7	380.0	380.9	386.1	393.1	396.6	402.4	413.9	422.5	423.0
162.5°	379.6	382.1	384.7	385.3	389.0	394.1	396.6	401.5	411.2	418.4	418.9
165°	386.3	388.6	390.8	391.5	393.2	395.5	396.6	400.1	407.0	412.2	412.8
167.5°	392.5	393.5	394.7	394.9	396.4	398.3	399.3	401.6	406.1	409.5	409.8
170°	396.6	397.6	398.8	399.0	399.1	399.2	399.3	401.6	406.1	409.5	409.5
172.5°	398.8	399.0	399.2	399.3	399.3	399.3	399.3	401.0	404.6	407.3	407.2
175°	401.7	401.7	401.7	401.7	401.0	399.8	399.3	400.4	402.7	404.4	404.4
177.5°	401.7	401.7	401.7	401.7	401.1	400.3	399.8	400.7	402.5	403.8	403.6
180°	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	406.8	406.8
2.5°	434.3	431.7
5°	558.5	561.2
7.5°	752.1	750.8
10°	935.3	947.0
12.5°	1068.8	1071.4
15°	1149.9	1155.1
17.5°	1181.3	1182.6
20°	1182.6	1179.9
22.5°	1168.2	1165.6
25°	1151.2	1149.9
27.5°	1135.5	1136.8
30°	1128.9	1132.9
32.5°	1128.9	1135.5
35°	1131.6	1138.1
37.5°	1130.2	1138.1
40°	1125.0	1134.2
42.5°	1110.6	1117.2
45°	1088.4	1096.2
47.5°	1059.6	1064.8
50°	1023.0	1028.2
52.5°	977.1	978.4
55°	922.2	927.4
57.5°	863.3	864.6
60°	797.9	801.8
62.5°	728.6	728.6
65°	655.3	657.9
67.5°	579.5	586.0
70°	502.3	503.6
72.5°	426.4	426.4
75°	347.9	349.2
77.5°	273.4	273.4
80°	202.7	204.1
82.5°	140.0	142.6
85°	87.6	87.6
87.5°	40.5	36.6
90°	10.2	10.2
92.5°	41.0	32.9
95°	143.0	118.3
97.5°	342.7	295.8
100°	493.8	437.8
102.5°	642.4	594.5
105°	831.9	806.1
107.5°	955.9	962.2
110°	1003.3	1030.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1007.5	1048.7
115°	980.8	1038.0
117.5°	924.2	987.6
120°	878.5	940.1
122.5°	834.1	894.8
125°	770.6	826.6
127.5°	713.6	760.8
130°	680.0	723.6
132.5°	649.5	688.6
135°	607.7	641.4
137.5°	574.2	601.8
140°	551.1	576.9
142.5°	532.1	554.3
145°	503.6	520.3
147.5°	481.6	495.5
150°	467.8	479.1
152.5°	456.0	464.5
155°	442.5	448.1
157.5°	431.7	435.7
160°	425.3	427.6
162.5°	421.1	423.3
165°	415.1	417.4
167.5°	410.7	411.7
170°	409.5	409.5
172.5°	406.3	405.5
175°	404.4	404.4
177.5°	402.7	401.7
180°	401.7	401.7



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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	4.63	5.58	5.54	6.51	7.71	17.79	18.74	18.70	19.67	20.87
	3H	5.34	6.19	6.26	7.14	8.36	19.63	20.49	20.55	21.43	22.65
	4H	5.64	6.45	6.58	7.40	8.63	20.28	21.09	21.21	22.03	23.27
	6H	5.90	6.64	6.84	7.60	8.84	20.71	21.46	21.66	22.41	23.65
	8H	5.97	6.68	6.92	7.65	8.89	20.83	21.54	21.78	22.51	23.76
	12H	5.99	6.67	6.95	7.63	8.90	20.90	21.58	21.86	22.54	23.81
4H	2H	11.85	12.65	12.78	13.60	14.83	18.08	18.89	19.02	19.83	21.06
	3H	13.42	14.10	14.37	15.08	16.32	20.13	20.80	21.08	21.78	23.03
	4H	13.52	14.14	14.48	15.11	16.38	20.89	21.51	21.85	22.48	23.75
	6H	13.54	14.07	14.51	15.07	16.34	21.43	21.97	22.41	22.96	24.23
	8H	13.52	14.02	14.49	15.00	16.29	21.60	22.10	22.57	23.09	24.37
	12H	13.48	13.93	14.47	14.93	16.22	21.69	22.14	22.69	23.15	24.44
8H	4H	14.97	15.47	15.94	16.46	17.74	20.96	21.46	21.94	22.45	23.74
	6H	15.22	15.63	16.22	16.66	17.94	21.59	22.01	22.59	23.04	24.32
	8H	15.24	15.60	16.24	16.62	17.92	21.81	22.18	22.82	23.19	24.49
	12H	15.21	15.53	16.22	16.54	17.89	21.96	22.28	22.97	23.29	24.64
12H	4H	15.12	15.57	16.11	16.57	17.86	20.92	21.37	21.91	22.38	23.67
	6H	15.47	15.84	16.48	16.86	18.16	21.58	21.94	22.58	22.96	24.26
	8H	15.55	15.87	16.56	16.88	18.23	21.81	22.13	22.82	23.14	24.49