

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: P937559

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937559
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

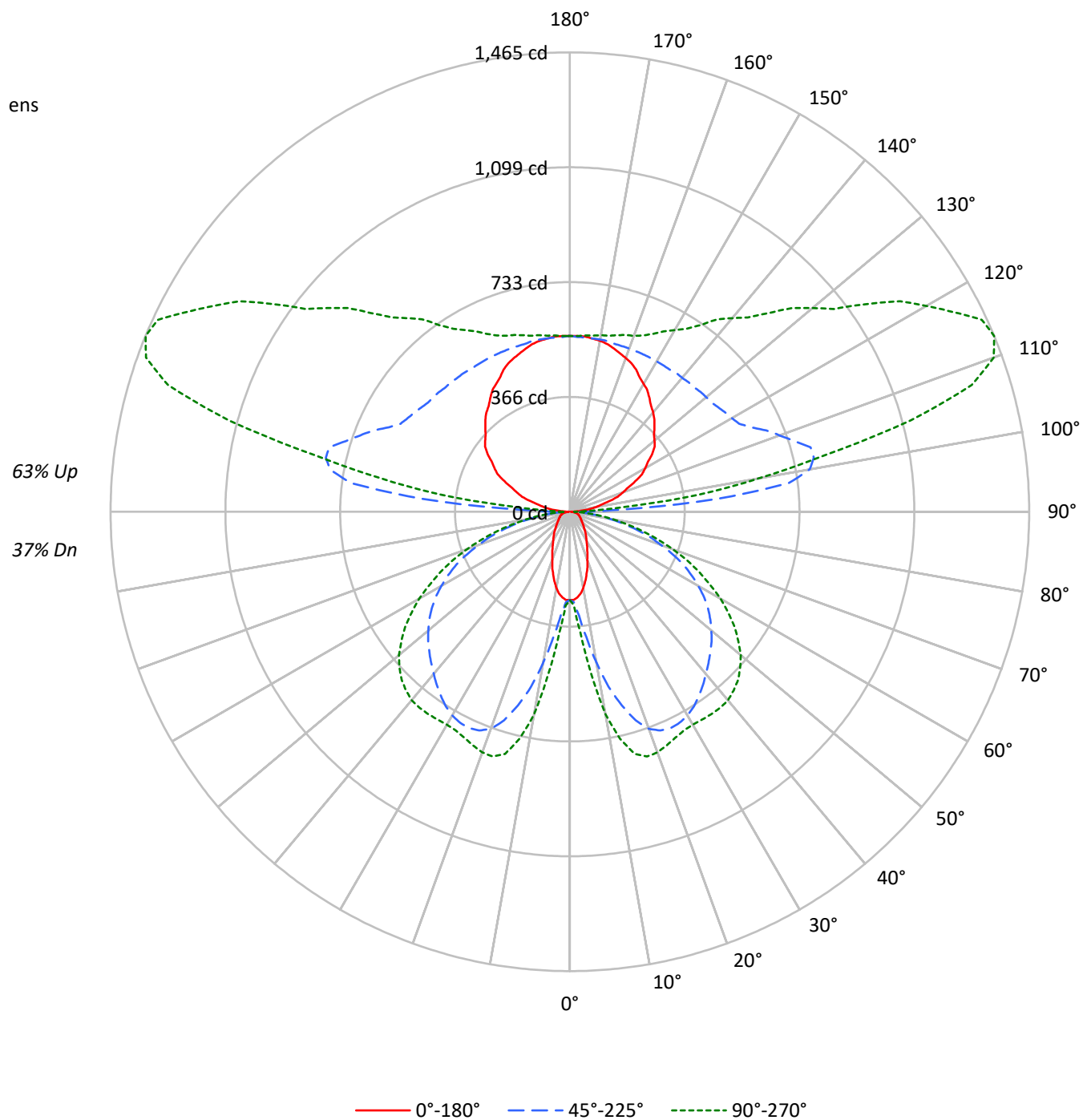
Lumens per Lamp: N/A
Luminaire Lumens: 5816.5 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 49.2
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: P937559

CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot



TEST NUMBER: P937559

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2612	2612	2612
5°	2549	3017	3511
10°	2310	4395	5821
15°	1961	5737	7029
20°	1594	6643	7164
25°	1328	6946	7017
30°	1119	6986	7005
35°	987	6864	7186
40°	859	6708	7373
45°	776	6591	7401
50°	711	6486	7280
55°	678	6333	6957
60°	692	6047	6447
65°	717	5616	5747
70°	759	4888	4855
75°	830	3974	3789
80°	889	2746	2553
85°	754	1449	1306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7401 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	0.6
10°-20°	161.4	2.8
20°-30°	282.3	4.9
30°-40°	363.4	6.2
40°-50°	405.9	7.0
50°-60°	388.8	6.7
60°-70°	308.1	5.3
70°-80°	181.2	3.1
80°-90°	52.5	0.9
90°-100°	273.4	4.7
100°-110°	718.9	12.4
110°-120°	745.4	12.8
120°-130°	597.9	10.3
130°-140°	469.2	8.1
140°-150°	360.1	6.2
150°-160°	259.3	4.5
160°-170°	158.7	2.7
170°-180°	53.6	0.9
0°-30°	480.1	8.3
0°-40°	843.5	14.5
0°-60°	1638.1	28.2
0°-90°	2179.9	37.5
90°-120°	1737.8	29.9
90°-150°	3165.0	54.4
90°-180°	3637.0	62.5
0°-180°	5816.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	282	282	282	282	282	
5°	274	294	331	375	388	25
15°	206	379	639	775	799	57
25°	131	430	761	795	796	60
35°	89	411	717	758	788	55
45°	61	328	634	726	758	47
55°	43	208	538	625	642	40
65°	34	110	399	449	455	34
75°	25	68	219	241	242	27
85°	9	21	54	60	61	10
90°	4	10	29	14	14	4
95°	36	142	471	243	165	40
105°	130	196	795	1207	1126	137
115°	230	279	637	1270	1450	227
125°	320	359	579	978	1154	284
135°	381	420	561	790	896	295
145°	442	471	554	674	727	277
155°	500	514	554	608	626	230
165°	540	547	554	576	583	152
175°	561	561	558	565	565	53
180°	561	561	561	561	561	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5
2.5°	281.5	281.5	283.3	284.2	286.0	286.9	288.7	290.6	296.0	296.9	298.7
5°	274.3	277.9	289.7	294.2	306.8	324.0	331.3	343.1	367.5	374.7	379.3
7.5°	263.4	271.5	300.5	307.8	339.4	384.7	403.7	429.0	468.0	487.0	502.4
10°	246.2	263.4	315.0	332.2	383.8	452.6	487.9	523.2	582.0	608.3	618.2
12.5°	227.2	255.3	330.4	353.9	428.1	528.6	571.2	610.1	677.1	712.4	717.8
15°	205.5	243.5	344.9	379.3	475.2	592.0	639.0	687.0	749.5	774.8	781.2
17.5°	186.5	234.4	358.4	394.7	511.4	649.0	697.0	736.8	787.5	804.7	809.2
20°	162.9	220.0	367.5	414.6	549.4	690.6	736.8	767.6	802.0	812.8	814.6
22.5°	145.7	204.6	372.9	421.8	574.8	716.0	754.9	779.3	802.9	806.5	807.4
25°	131.2	187.4	372.0	430.0	596.5	731.4	761.2	779.3	792.9	794.7	794.7
27.5°	117.7	168.4	368.4	431.8	612.8	735.0	758.5	771.2	777.5	781.2	781.2
30°	105.9	150.3	359.3	428.1	620.0	731.4	750.4	756.7	763.1	768.5	771.2
32.5°	96.9	133.1	345.8	420.9	620.9	722.3	735.9	739.5	748.6	761.2	765.8
35°	88.7	115.9	330.4	410.9	615.5	707.8	716.9	720.5	738.6	757.6	764.0
37.5°	80.6	103.2	310.5	393.7	607.4	690.6	697.0	703.3	731.4	754.0	761.2
40°	72.4	92.3	286.9	374.7	594.7	669.8	675.3	685.2	722.3	748.6	755.8
42.5°	66.1	83.3	261.6	354.8	578.4	646.3	654.4	668.9	711.5	739.5	747.7
45°	60.6	74.2	234.4	327.7	557.6	621.8	633.6	653.5	698.8	725.9	733.2
47.5°	55.2	67.9	206.4	299.6	535.0	597.4	612.8	635.4	681.6	707.8	714.2
50°	50.7	61.6	178.3	269.7	510.5	571.2	589.3	612.8	659.9	684.3	692.4
52.5°	47.1	56.1	152.1	239.9	482.5	544.0	564.8	589.3	633.6	657.1	662.6
55°	43.4	51.6	129.4	208.2	453.5	515.0	537.7	561.2	604.6	624.6	628.2
57.5°	41.6	48.0	110.4	178.3	422.7	482.5	507.8	529.5	570.3	585.6	589.3
60°	38.9	45.3	95.9	153.0	389.2	451.7	473.4	495.1	529.5	542.2	544.9
62.5°	36.2	43.4	85.1	128.5	354.8	415.5	437.2	457.1	486.1	495.1	498.7
65°	34.4	41.6	76.9	110.4	319.5	377.5	399.2	416.4	439.9	449.0	450.8
67.5°	32.6	39.8	70.6	95.0	284.2	339.4	355.7	372.0	390.1	399.2	400.1
70°	29.9	38.0	65.2	84.2	248.0	296.0	309.6	326.8	341.2	345.8	348.5
72.5°	28.1	35.3	61.6	76.0	210.9	254.4	267.0	277.0	289.7	294.2	294.2
75°	25.3	31.7	57.9	67.9	172.9	208.2	219.0	229.0	239.0	240.8	238.1
77.5°	22.6	28.1	49.8	57.0	134.9	164.7	173.8	179.2	187.4	189.2	190.1
80°	19.0	24.4	38.9	44.4	97.8	121.3	127.6	132.2	139.4	139.4	141.2
82.5°	14.5	19.0	28.1	31.7	66.1	83.3	88.7	91.4	95.9	95.9	95.9
85°	9.1	11.8	18.1	20.8	39.8	50.7	54.3	55.2	58.8	59.7	59.7
87.5°	4.5	6.3	11.8	12.7	20.8	26.2	26.2	28.1	28.1	27.2	26.2
90°	3.8	6.8	9.8	10.5	16.6	24.6	28.6	25.4	19.1	14.3	14.3
92.5°	15.0	40.6	66.3	72.7	102.2	141.5	161.1	141.2	101.4	71.5	68.7
95°	36.1	83.0	129.9	141.6	251.4	397.7	471.0	420.3	318.9	242.9	234.3
97.5°	62.5	103.8	145.2	155.5	338.6	582.7	704.8	672.7	608.6	560.6	544.2
100°	82.8	120.3	157.8	167.2	370.4	641.3	776.7	779.1	783.7	787.2	767.7
102.5°	100.1	135.1	170.1	178.9	385.0	659.7	797.1	837.9	919.6	980.7	964.0
105°	129.5	159.1	188.7	196.1	395.7	661.8	794.8	886.3	1069.4	1206.7	1197.7
107.5°	159.7	187.3	214.9	221.8	397.7	632.3	749.6	877.3	1132.6	1324.2	1326.3
110°	179.9	204.9	229.8	236.1	394.7	606.2	711.9	854.7	1140.1	1354.2	1363.6

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CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	200.0	223.7	247.4	253.4	394.8	583.4	677.7	823.8	1115.9	1335.0	1349.4
115°	230.0	251.9	273.8	279.3	398.5	557.3	636.7	777.4	1058.9	1269.9	1289.9
117.5°	259.8	279.7	299.6	304.6	405.9	540.9	608.4	735.4	989.4	1180.0	1202.1
120°	277.1	295.8	314.5	319.3	411.8	535.4	597.1	713.2	945.3	1119.3	1140.9
122.5°	294.1	313.0	331.9	336.6	420.5	532.5	588.4	692.9	901.9	1058.7	1079.9
125°	320.1	337.3	354.5	358.8	432.2	530.1	579.0	667.8	845.3	978.5	998.0
127.5°	341.1	358.4	375.9	380.3	443.9	528.7	571.2	647.4	799.8	914.1	930.6
130°	352.4	371.1	389.9	394.6	452.4	529.6	568.2	636.1	771.7	873.5	888.7
132.5°	364.1	382.8	401.5	406.2	459.3	530.1	565.5	626.2	747.7	838.8	852.5
135°	381.4	398.5	415.6	419.8	466.9	529.6	561.0	611.9	713.5	789.8	801.6
137.5°	399.1	416.0	432.8	437.1	478.1	532.9	560.2	603.2	689.2	753.7	763.3
140°	413.7	429.3	444.9	448.8	485.1	533.4	557.6	594.7	669.0	724.8	733.7
142.5°	425.1	439.5	453.8	457.5	490.9	535.3	557.6	590.2	655.4	704.4	712.2
145°	442.4	454.9	467.4	470.6	498.4	535.4	553.9	580.6	633.9	673.9	679.8
147.5°	459.7	472.0	484.1	487.2	509.4	539.0	553.9	574.9	616.9	648.4	653.3
150°	471.0	482.0	493.0	495.8	515.2	541.0	553.9	571.6	607.0	633.6	637.5
152.5°	482.6	491.0	499.4	501.5	518.9	542.2	553.9	569.0	599.2	621.9	624.9
155°	500.0	506.2	512.4	514.0	527.3	545.0	553.9	565.9	590.0	608.0	610.0
157.5°	512.8	518.8	524.8	526.4	535.5	547.7	553.9	563.2	581.9	596.0	597.3
160°	521.5	526.2	530.8	532.0	539.3	549.0	553.9	561.9	577.9	590.0	590.8
162.5°	530.1	533.6	537.1	538.0	543.3	550.3	553.9	560.7	574.1	584.3	585.0
165°	539.5	542.6	545.8	546.6	549.1	552.2	553.9	558.8	568.4	575.7	576.5
167.5°	548.2	549.7	551.2	551.6	553.6	556.2	557.6	560.7	567.1	571.9	572.2
170°	553.9	555.3	556.9	557.2	557.3	557.5	557.6	560.7	567.1	571.9	571.9
172.5°	556.9	557.2	557.5	557.6	557.6	557.6	557.6	560.1	565.1	568.9	568.6
175°	561.0	561.0	561.0	561.0	559.8	558.3	557.6	559.2	562.4	564.7	564.7
177.5°	561.0	561.0	561.0	561.0	560.1	558.9	558.3	559.6	562.1	564.0	563.6
180°	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0

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CATALOG NUMBER: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	281.5	281.5
2.5°	300.5	298.7
5°	386.5	388.3
7.5°	520.5	519.6
10°	647.2	655.3
12.5°	739.5	741.3
15°	795.6	799.3
17.5°	817.4	818.3
20°	818.3	816.5
22.5°	808.3	806.5
25°	796.5	795.6
27.5°	785.7	786.6
30°	781.2	783.9
32.5°	781.2	785.7
35°	783.0	787.5
37.5°	782.1	787.5
40°	778.4	784.8
42.5°	768.5	773.0
45°	753.1	758.5
47.5°	733.2	736.8
50°	707.8	711.5
52.5°	676.2	677.1
55°	638.1	641.8
57.5°	597.4	598.3
60°	552.1	554.9
62.5°	504.2	504.2
65°	453.5	455.3
67.5°	401.0	405.5
70°	347.6	348.5
72.5°	295.1	295.1
75°	240.8	241.7
77.5°	189.2	189.2
80°	140.3	141.2
82.5°	96.9	98.7
85°	60.6	60.6
87.5°	28.1	25.3
90°	14.3	14.3
92.5°	57.3	45.9
95°	199.8	165.3
97.5°	478.6	413.0
100°	689.6	611.4
102.5°	897.1	830.2
105°	1161.7	1125.7
107.5°	1335.0	1343.7
110°	1401.1	1438.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1407.0	1464.6
115°	1369.7	1449.5
117.5°	1290.6	1379.1
120°	1226.9	1312.8
122.5°	1164.8	1249.6
125°	1076.1	1154.4
127.5°	996.6	1062.5
130°	949.6	1010.5
132.5°	907.0	961.6
135°	848.6	895.7
137.5°	801.9	840.4
140°	769.7	805.7
142.5°	743.1	774.1
145°	703.2	726.7
147.5°	672.6	692.0
150°	653.3	669.0
152.5°	636.8	648.7
155°	617.9	625.7
157.5°	602.9	608.4
160°	594.0	597.1
162.5°	588.1	591.1
165°	579.7	582.8
167.5°	573.5	574.9
170°	571.9	571.9
172.5°	567.4	566.3
175°	564.7	564.7
177.5°	562.4	561.0
180°	561.0	561.0

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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	3.06	3.84	4.11	4.90	6.34	16.20	16.98	17.25	18.04	19.48
	3H	3.76	4.46	4.82	5.53	6.99	18.02	18.72	19.08	19.79	21.25
	4H	4.05	4.72	5.13	5.79	7.25	18.65	19.32	19.72	20.39	21.85
	6H	4.30	4.92	5.38	5.99	7.47	19.06	19.68	20.14	20.75	22.23
	8H	4.37	4.95	5.45	6.04	7.51	19.17	19.76	20.26	20.85	22.32
	12H	4.38	4.94	5.47	6.02	7.52	19.23	19.79	20.32	20.88	22.37
4H	2H	10.24	10.91	11.32	11.98	13.44	16.46	17.13	17.54	18.20	19.67
	3H	11.80	12.36	12.89	13.46	14.94	18.49	19.05	19.57	20.15	21.62
	4H	11.90	12.41	12.99	13.50	14.99	19.24	19.76	20.33	20.84	22.34
	6H	11.90	12.34	13.00	13.46	14.94	19.76	20.21	20.86	21.32	22.81
	8H	11.88	12.29	12.98	13.39	14.90	19.92	20.33	21.02	21.43	22.94
	12H	11.83	12.20	12.95	13.32	14.83	20.00	20.37	21.12	21.49	23.00
8H	4H	13.32	13.74	14.42	14.84	16.35	19.30	19.71	20.40	20.81	22.32
	6H	13.56	13.90	14.68	15.05	16.55	19.91	20.25	21.03	21.40	22.90
	8H	13.58	13.88	14.71	15.01	16.53	20.12	20.42	21.25	21.55	23.07
	12H	13.54	13.81	14.68	14.93	16.49	20.25	20.52	21.39	21.64	23.20
12H	4H	13.46	13.83	14.58	14.95	16.46	19.25	19.62	20.36	20.74	22.25
	6H	13.82	14.12	14.95	15.24	16.76	19.89	20.19	21.02	21.32	22.84
	8H	13.88	14.15	15.02	15.27	16.83	20.11	20.37	21.24	21.50	23.06