

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: P937784

Luminaire Tested: SQ4-FB-100U-125D-B2750-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937784
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B2750-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

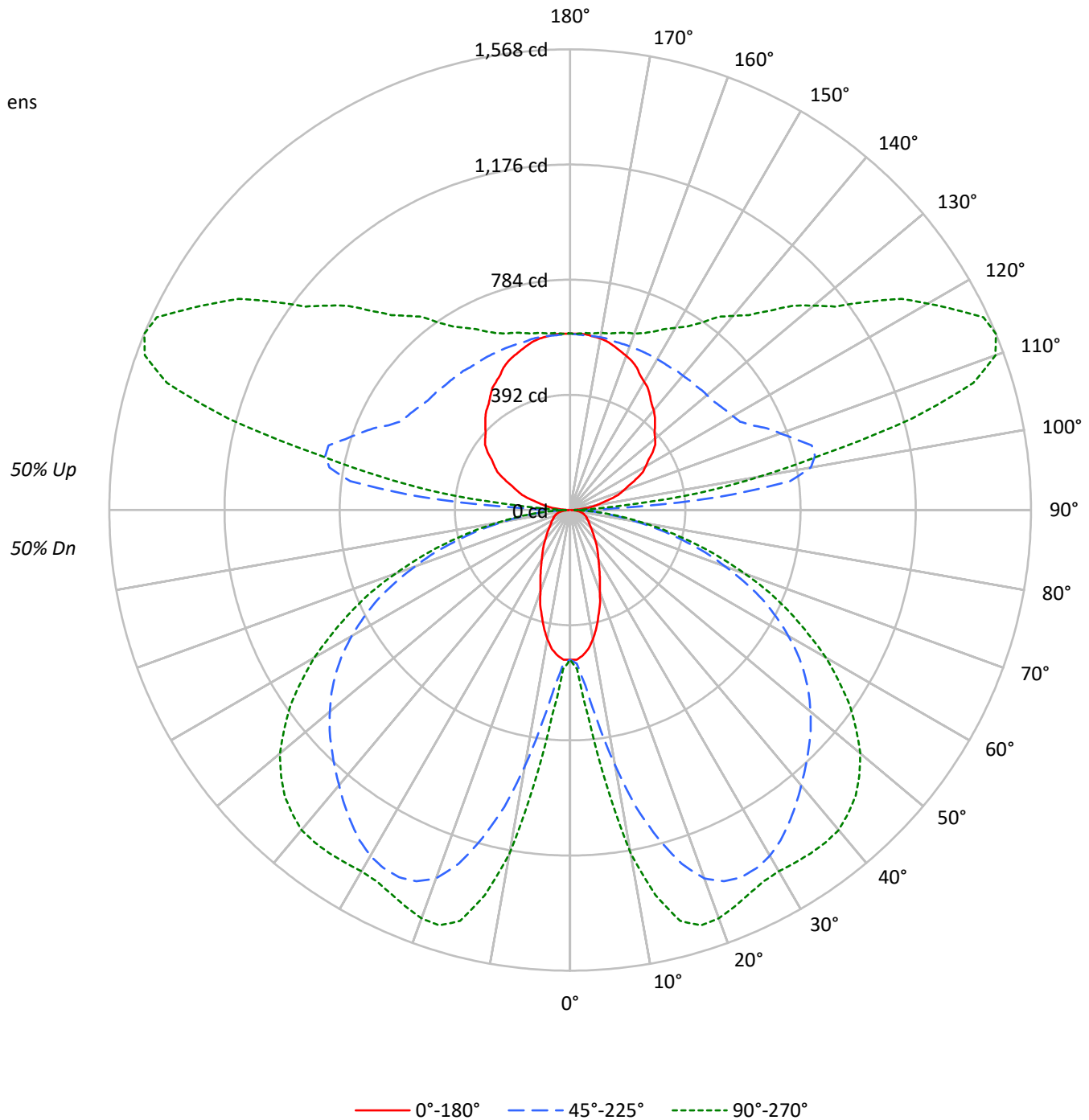
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7840.2 lumens
Efficiency: N/A
Efficacy: 114.0 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: General Diffuse

Input Watts (W): 68.8
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: P937784
CATALOG NUMBER: SQ4-FB-100U-125D-B2750-1D-UNV-STD-W-4-3500K

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	50	30	10	0
RCR																					
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	47	47	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	38	38	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	32	32	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	27	27	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	23	23	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	20	20	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	17	17	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	15	15	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	14	14	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4731	4731	4731
5°	4617	5465	6360
10°	4183	7960	10544
15°	3552	10392	12732
20°	2889	12034	12976
25°	2407	12584	12713
30°	2027	12653	12689
35°	1789	12434	13016
40°	1557	12151	13355
45°	1407	11940	13407
50°	1288	11749	13186
55°	1229	11471	12601
60°	1254	10954	11678
65°	1298	10172	10410
70°	1373	8854	8795
75°	1505	7200	6863
80°	1610	4976	4625
85°	1358	2626	2368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13407 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	0.8
10°-20°	292.3	3.7
20°-30°	511.4	6.5
30°-40°	658.3	8.4
40°-50°	735.3	9.4
50°-60°	704.2	9.0
60°-70°	558.1	7.1
70°-80°	328.2	4.2
80°-90°	93.5	1.2
90°-100°	292.7	3.7
100°-110°	769.6	9.8
110°-120°	798.0	10.2
120°-130°	640.1	8.2
130°-140°	502.2	6.4
140°-150°	385.5	4.9
150°-160°	277.6	3.5
160°-170°	169.9	2.2
170°-180°	57.4	0.7
0°-30°	869.7	11.1
0°-40°	1527.9	19.5
0°-60°	2967.4	37.8
0°-90°	3947.1	50.3
90°-120°	1860.4	23.7
90°-150°	3388.2	43.2
90°-180°	3893.0	49.7
0°-180°	7840.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	497	533	600	679	703	46
15°	372	687	1158	1404	1448	104
25°	238	779	1379	1440	1441	110
35°	161	744	1299	1372	1426	100
45°	110	594	1148	1315	1374	85
55°	79	377	974	1131	1162	72
65°	62	200	723	813	825	62
75°	46	123	397	436	438	48
85°	16	38	98	108	110	17
90°	4	11	31	15	15	4
95°	39	152	504	260	177	43
105°	139	210	851	1292	1205	147
115°	246	299	682	1360	1552	243
125°	343	384	620	1048	1236	304
135°	408	449	601	846	959	316
145°	474	504	593	721	778	297
155°	535	550	593	651	670	246
165°	578	585	593	616	624	163
175°	601	601	597	605	605	57
180°	601	601	601	601	601	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9
2.5°	509.9	509.9	513.2	514.8	518.1	519.8	523.1	526.4	536.1	537.8	541.1
5°	496.8	503.4	524.7	532.9	555.8	587.0	600.1	621.4	665.7	678.8	687.0
7.5°	477.1	491.9	544.4	557.5	614.8	696.8	731.3	777.2	847.7	882.1	910.0
10°	445.9	477.1	570.5	601.7	695.2	819.8	883.7	947.7	1054.3	1101.8	1119.9
12.5°	411.5	462.4	598.5	641.1	775.6	957.6	1034.6	1105.1	1226.5	1290.4	1300.2
15°	372.2	441.1	624.7	687.0	860.8	1072.3	1157.6	1244.5	1357.7	1403.5	1415.0
17.5°	337.8	424.7	649.3	714.9	926.4	1175.6	1262.5	1334.7	1426.5	1457.7	1465.8
20°	295.2	398.5	665.7	751.0	995.3	1251.1	1334.7	1390.4	1452.7	1472.4	1475.7
22.5°	264.0	370.5	675.5	764.1	1041.2	1296.9	1367.5	1411.7	1454.4	1461.0	1462.5
25°	237.8	339.4	673.9	778.8	1080.5	1324.8	1379.0	1411.7	1436.3	1439.6	1439.6
27.5°	213.2	304.9	667.4	782.1	1110.0	1331.4	1374.0	1397.0	1408.4	1415.0	1415.0
30°	191.9	272.2	651.0	775.6	1123.2	1324.8	1359.2	1370.7	1382.2	1392.1	1397.0
32.5°	175.5	241.0	626.4	762.4	1124.8	1308.4	1333.1	1339.5	1356.0	1379.0	1387.1
35°	160.7	209.9	598.5	744.4	1114.9	1282.2	1298.6	1305.1	1337.9	1372.4	1383.8
37.5°	145.9	186.9	562.4	713.3	1100.2	1251.1	1262.5	1274.0	1324.8	1365.8	1379.0
40°	131.2	167.2	519.8	678.8	1077.2	1213.3	1223.2	1241.2	1308.4	1356.0	1369.1
42.5°	119.7	150.9	473.8	642.7	1047.7	1170.7	1185.5	1211.7	1288.8	1339.5	1354.4
45°	109.9	134.5	424.7	593.5	1010.0	1126.5	1147.8	1183.8	1265.8	1315.0	1328.1
47.5°	100.0	123.0	373.8	542.7	969.0	1082.2	1110.0	1151.1	1234.6	1282.2	1293.7
50°	91.9	111.5	323.0	488.6	924.7	1034.6	1067.5	1110.0	1195.3	1239.5	1254.4
52.5°	85.3	101.6	275.5	434.5	873.9	985.4	1023.2	1067.5	1147.8	1190.4	1200.2
55°	78.7	93.4	234.5	377.1	821.4	933.0	973.9	1016.6	1095.3	1131.3	1137.9
57.5°	75.4	86.9	200.0	323.0	765.7	873.9	919.9	959.2	1033.0	1060.9	1067.5
60°	70.5	82.0	173.8	277.1	705.0	818.2	857.6	896.9	959.2	982.2	987.0
62.5°	65.6	78.7	154.2	232.9	642.7	752.6	792.0	828.0	880.5	896.9	903.4
65°	62.3	75.4	139.3	200.0	578.8	683.7	723.1	754.3	796.9	813.3	816.6
67.5°	59.0	72.2	127.9	172.2	514.8	614.8	644.4	673.9	706.7	723.1	724.7
70°	54.1	68.9	118.0	152.5	449.2	536.1	560.8	591.9	618.1	626.4	631.3
72.5°	50.9	64.0	111.5	137.7	382.1	460.8	483.7	501.7	524.7	532.9	532.9
75°	45.9	57.4	104.9	123.0	313.2	377.1	396.8	414.8	432.9	436.1	431.2
77.5°	41.0	50.9	90.2	103.3	244.3	298.5	314.8	324.6	339.4	342.6	344.3
80°	34.4	44.3	70.5	80.3	177.0	219.7	231.2	239.3	252.5	252.5	255.8
82.5°	26.3	34.4	50.9	57.4	119.7	150.9	160.7	165.6	173.8	173.8	173.8
85°	16.4	21.3	32.8	37.7	72.2	91.9	98.4	100.0	106.6	108.2	108.2
87.5°	8.2	11.4	21.3	23.0	37.7	47.6	47.6	50.9	50.9	49.2	47.6
90°	4.1	7.3	10.5	11.2	17.7	26.4	30.6	27.2	20.4	15.3	15.3
92.5°	16.1	43.5	70.9	77.8	109.4	151.5	172.5	151.2	108.5	76.6	73.5
95°	38.7	88.9	139.1	151.6	269.1	425.8	504.2	449.9	341.4	260.0	250.8
97.5°	66.9	111.1	155.4	166.5	362.5	623.8	754.5	720.2	651.6	600.1	582.6
100°	88.7	128.8	168.9	179.0	396.5	686.5	831.5	834.0	839.0	842.7	821.8
102.5°	107.2	144.7	182.1	191.5	412.1	706.2	853.3	897.0	984.4	1049.9	1032.0
105°	138.7	170.4	202.0	210.0	423.6	708.4	850.9	948.8	1144.8	1291.8	1282.2
107.5°	170.9	200.5	230.0	237.4	425.8	676.8	802.4	939.2	1212.5	1417.6	1419.9
110°	192.6	219.4	246.0	252.7	422.5	648.9	762.1	914.9	1220.6	1449.7	1459.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	214.1	239.4	264.8	271.2	422.7	624.5	725.5	881.9	1194.6	1429.2	1444.6
115°	246.2	269.7	293.1	299.0	426.6	596.6	681.6	832.3	1133.5	1359.5	1380.8
117.5°	278.1	299.4	320.7	326.1	434.5	579.1	651.4	787.3	1059.2	1263.2	1286.8
120°	296.6	316.7	336.7	341.8	440.9	573.2	639.2	763.5	1011.9	1198.3	1221.3
122.5°	314.8	335.1	355.3	360.4	450.2	570.1	629.9	741.8	965.5	1133.3	1156.0
125°	342.6	361.0	379.5	384.1	462.7	567.4	619.9	714.9	904.9	1047.5	1068.4
127.5°	365.1	383.7	402.4	407.1	475.2	566.0	611.4	693.0	856.2	978.6	996.2
130°	377.2	397.3	417.3	422.4	484.3	567.0	608.2	680.9	826.2	935.1	951.4
132.5°	389.7	409.8	429.8	434.9	491.7	567.4	605.3	670.4	800.4	898.0	912.6
135°	408.3	426.6	444.9	449.4	499.8	567.0	600.6	655.0	763.9	845.5	858.1
137.5°	427.2	445.4	463.4	467.9	511.8	570.5	599.7	645.7	737.8	806.9	817.2
140°	442.9	459.6	476.3	480.4	519.3	571.0	596.9	636.6	716.2	775.9	785.5
142.5°	455.0	470.4	485.9	489.7	525.5	573.1	596.9	631.8	701.7	754.1	762.4
145°	473.6	487.0	500.4	503.8	533.5	573.2	592.9	621.5	678.6	721.4	727.7
147.5°	492.2	505.2	518.2	521.5	545.4	577.0	592.9	615.4	660.4	694.1	699.3
150°	504.2	516.0	527.8	530.8	551.6	579.2	592.9	611.9	649.8	678.3	682.5
152.5°	516.7	525.6	534.6	536.8	555.5	580.4	592.9	609.1	641.5	665.8	669.0
155°	535.3	541.9	548.6	550.2	564.4	583.4	592.9	605.8	631.6	650.9	653.0
157.5°	548.9	555.4	561.8	563.5	573.3	586.3	592.9	602.9	623.0	638.0	639.4
160°	558.2	563.3	568.2	569.5	577.3	587.7	592.9	601.6	618.7	631.6	632.5
162.5°	567.4	571.2	575.0	576.0	581.6	589.2	592.9	600.2	614.6	625.5	626.3
165°	577.5	580.9	584.3	585.2	587.8	591.2	592.9	598.2	608.5	616.3	617.2
167.5°	586.8	588.5	590.1	590.5	592.6	595.5	596.9	600.3	607.1	612.2	612.6
170°	592.9	594.5	596.1	596.5	596.6	596.8	596.9	600.3	607.1	612.2	612.2
172.5°	596.1	596.5	596.8	596.9	596.9	596.9	596.9	599.6	604.9	609.0	608.7
175°	600.6	600.6	600.6	600.6	599.3	597.7	596.9	598.6	602.0	604.6	604.6
177.5°	600.6	600.6	600.6	600.6	599.6	598.4	597.7	599.0	601.7	603.8	603.4
180°	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	509.9	509.9
2.5°	544.4	541.1
5°	700.1	703.4
7.5°	942.8	941.2
10°	1172.3	1187.1
12.5°	1339.5	1342.8
15°	1441.3	1447.8
17.5°	1480.6	1482.3
20°	1482.3	1479.0
22.5°	1464.2	1461.0
25°	1442.8	1441.3
27.5°	1423.2	1424.8
30°	1415.0	1420.0
32.5°	1415.0	1423.2
35°	1418.3	1426.5
37.5°	1416.7	1426.5
40°	1410.1	1421.5
42.5°	1392.1	1400.2
45°	1364.2	1374.0
47.5°	1328.1	1334.7
50°	1282.2	1288.8
52.5°	1224.8	1226.5
55°	1155.9	1162.5
57.5°	1082.2	1083.8
60°	1000.2	1005.1
62.5°	913.3	913.3
65°	821.4	824.7
67.5°	726.4	734.6
70°	629.7	631.3
72.5°	534.5	534.5
75°	436.1	437.8
77.5°	342.6	342.6
80°	254.2	255.8
82.5°	175.5	178.7
85°	109.9	109.9
87.5°	50.9	45.9
90°	15.3	15.3
92.5°	61.3	49.1
95°	213.9	176.9
97.5°	512.3	442.2
100°	738.2	654.6
102.5°	960.4	888.8
105°	1243.6	1205.1
107.5°	1429.2	1438.5
110°	1499.9	1540.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1506.2	1567.8
115°	1466.3	1551.8
117.5°	1381.6	1476.4
120°	1313.4	1405.4
122.5°	1246.9	1337.7
125°	1152.0	1235.8
127.5°	1066.9	1137.4
130°	1016.6	1081.8
132.5°	970.9	1029.4
135°	908.4	958.8
137.5°	858.4	899.6
140°	824.0	862.5
142.5°	795.5	828.7
145°	752.8	777.9
147.5°	720.1	740.8
150°	699.3	716.2
152.5°	681.7	694.5
155°	661.4	669.9
157.5°	645.5	651.4
160°	635.9	639.2
162.5°	629.6	632.8
165°	620.5	623.9
167.5°	614.0	615.4
170°	612.2	612.2
172.5°	607.5	606.2
175°	604.6	604.6
177.5°	602.0	600.6
180°	600.6	600.6



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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	6.42	7.32	7.37	8.29	9.56	19.56	20.46	20.51	21.43	22.70
	3H	7.13	7.94	8.09	8.92	10.21	21.39	22.20	22.35	23.18	24.46
	4H	7.43	8.20	8.40	9.18	10.48	22.03	22.80	23.00	23.78	25.07
	6H	7.69	8.40	8.67	9.38	10.69	22.45	23.16	23.43	24.14	25.45
	8H	7.76	8.43	8.75	9.44	10.74	22.56	23.24	23.55	24.24	25.55
	12H	7.78	8.42	8.77	9.42	10.75	22.62	23.27	23.62	24.27	25.60
4H	2H	13.62	14.39	14.60	15.37	16.66	19.84	20.61	20.82	21.59	22.89
	3H	15.19	15.84	16.18	16.85	18.16	21.88	22.52	22.86	23.53	24.84
	4H	15.29	15.88	16.29	16.88	18.21	22.64	23.23	23.63	24.23	25.56
	6H	15.30	15.81	16.31	16.84	18.17	23.17	23.67	24.17	24.70	26.03
	8H	15.28	15.76	16.29	16.78	18.12	23.32	23.80	24.33	24.82	26.16
	12H	15.24	15.67	16.27	16.71	18.06	23.41	23.84	24.44	24.88	26.23
8H	4H	16.73	17.20	17.74	18.22	19.57	22.70	23.18	23.71	24.20	25.54
	6H	16.97	17.37	18.01	18.43	19.77	23.32	23.71	24.35	24.78	26.12
	8H	16.99	17.34	18.03	18.39	19.75	23.53	23.88	24.57	24.93	26.29
	12H	16.96	17.27	18.01	18.31	19.71	23.67	23.98	24.72	25.02	26.42
12H	4H	16.87	17.30	17.90	18.34	19.69	22.66	23.09	23.68	24.12	25.47
	6H	17.23	17.58	18.27	18.62	19.98	23.30	23.65	24.35	24.70	26.06
	8H	17.30	17.61	18.35	18.65	20.05	23.53	23.83	24.57	24.88	26.28