

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: P936602

Luminaire Tested: SQ4-FB-025U-125D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936602
REPORT IS A COMBINATION OF REPORTS P933440 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

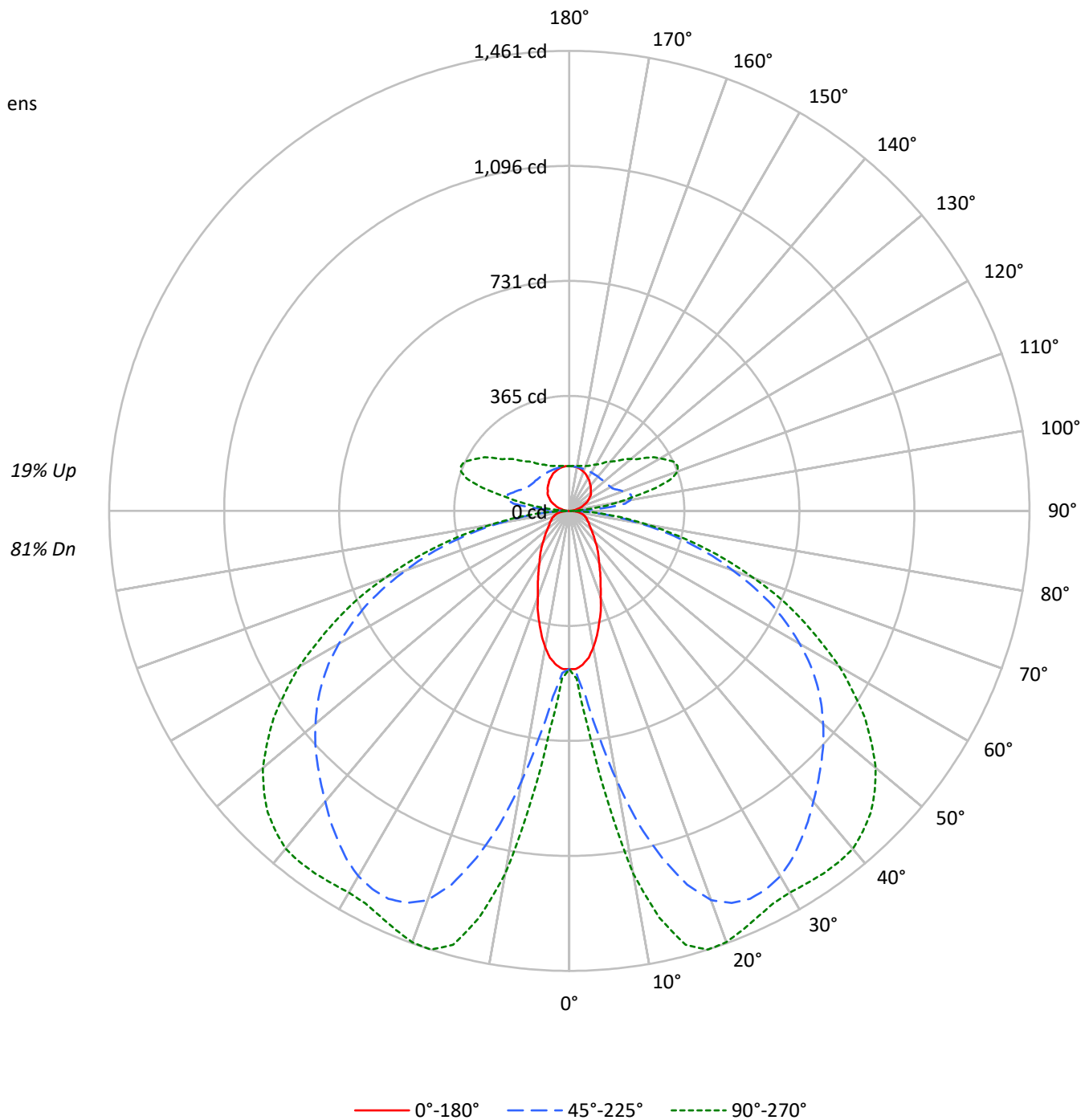
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4812.2 lumens
Efficiency: N/A
Efficacy: 97.0 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: Semi-Direct

Input Watts (W): 49.6
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	50	30	10	0
RCR																					
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4663	4663	4663
5°	4551	5385	6268
10°	4123	7845	10392
15°	3500	10242	12548
20°	2847	11860	12788
25°	2372	12403	12529
30°	1997	12471	12506
35°	1762	12254	12828
40°	1534	11975	13162
45°	1387	11767	13214
50°	1269	11578	12995
55°	1211	11306	12419
60°	1236	10796	11510
65°	1280	10024	10260
70°	1353	8726	8668
75°	1486	7096	6765
80°	1587	4905	4558
85°	1333	2586	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13214 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.4
10°-20°	288.1	6.0
20°-30°	504.0	10.5
30°-40°	648.8	13.5
40°-50°	724.6	15.1
50°-60°	694.0	14.4
60°-70°	550.0	11.4
70°-80°	323.4	6.7
80°-90°	90.4	1.9
90°-100°	69.5	1.4
100°-110°	182.7	3.8
110°-120°	189.4	3.9
120°-130°	151.9	3.2
130°-140°	119.2	2.5
140°-150°	91.5	1.9
150°-160°	65.9	1.4
160°-170°	40.3	0.8
170°-180°	13.6	0.3
0°-30°	857.1	17.8
0°-40°	1505.8	31.3
0°-60°	2924.5	60.8
0°-90°	3888.4	80.8
90°-120°	441.5	9.2
90°-150°	804.1	16.7
90°-180°	924.0	19.2
0°-180°	4812.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	490	525	591	669	693	45
15°	367	677	1141	1383	1427	102
25°	234	768	1359	1419	1420	108
35°	158	734	1280	1353	1406	99
45°	108	585	1131	1296	1354	84
55°	78	372	960	1115	1146	71
65°	61	197	713	802	813	61
75°	45	121	391	430	432	47
85°	16	37	97	107	108	17
90°	1	3	7	4	4	2
95°	9	36	120	62	42	10
105°	33	50	202	307	286	35
115°	58	71	162	323	368	58
125°	81	91	147	249	293	72
135°	97	107	142	201	228	75
145°	112	120	141	171	185	70
155°	127	130	141	154	159	58
165°	137	139	141	146	148	39
175°	142	142	142	143	143	14
180°	142	142	142	142	142	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5
2.5°	502.5	502.5	505.8	507.4	510.6	512.3	515.5	518.8	528.4	530.0	533.3
5°	489.6	496.1	517.1	525.2	547.8	578.5	591.4	612.4	656.1	669.0	677.1
7.5°	470.2	484.8	536.5	549.4	605.9	686.7	720.7	766.0	835.4	869.3	896.8
10°	439.5	470.2	562.3	593.1	685.1	807.9	871.0	934.0	1039.0	1085.9	1103.7
12.5°	405.6	455.7	589.8	631.8	764.4	943.7	1019.7	1089.2	1208.7	1271.8	1281.4
15°	366.8	434.7	615.7	677.1	848.3	1056.8	1140.8	1226.5	1338.1	1383.2	1394.6
17.5°	332.9	418.6	639.9	704.6	913.0	1158.6	1244.3	1315.4	1405.9	1436.6	1444.6
20°	290.9	392.7	656.1	740.1	980.9	1233.0	1315.4	1370.3	1431.7	1451.1	1454.4
22.5°	260.1	365.2	665.7	753.0	1026.1	1278.2	1347.7	1391.3	1433.4	1439.9	1441.4
25°	234.4	334.5	664.2	767.5	1064.9	1305.7	1359.1	1391.3	1415.6	1418.8	1418.8
27.5°	210.1	300.5	657.7	770.8	1094.0	1312.2	1354.2	1376.8	1388.1	1394.6	1394.6
30°	189.1	268.3	641.6	764.4	1106.9	1305.7	1339.6	1350.9	1362.2	1372.0	1376.8
32.5°	173.0	237.5	617.3	751.4	1108.6	1289.5	1313.8	1320.2	1336.4	1359.1	1367.1
35°	158.3	206.9	589.8	733.6	1098.8	1263.7	1279.8	1286.3	1318.6	1352.6	1363.8
37.5°	143.8	184.2	554.3	703.0	1084.3	1233.0	1244.3	1255.6	1305.7	1346.1	1359.1
40°	129.3	164.8	512.3	669.0	1061.7	1195.8	1205.5	1223.3	1289.5	1336.4	1349.3
42.5°	117.9	148.7	467.0	633.5	1032.5	1153.8	1168.3	1194.2	1270.1	1320.2	1334.8
45°	108.3	132.6	418.6	584.9	995.4	1110.2	1131.2	1166.7	1247.5	1296.0	1308.9
47.5°	98.6	121.2	368.4	534.9	955.0	1066.5	1094.0	1134.4	1216.8	1263.7	1275.0
50°	90.5	109.9	318.3	481.5	911.4	1019.7	1052.0	1094.0	1178.0	1221.6	1236.2
52.5°	84.0	100.2	271.5	428.2	861.3	971.1	1008.4	1052.0	1131.2	1173.2	1182.9
55°	77.5	92.1	231.1	371.7	809.6	919.5	959.9	1001.9	1079.4	1115.0	1121.5
57.5°	74.3	85.7	197.1	318.3	754.6	861.3	906.6	945.4	1018.0	1045.5	1052.0
60°	69.5	80.8	171.3	273.1	694.9	806.4	845.2	883.9	945.4	968.0	972.8
62.5°	64.7	77.5	151.9	229.5	633.5	741.7	780.5	816.0	867.8	883.9	890.3
65°	61.4	74.3	137.3	197.1	570.4	673.8	712.6	743.4	785.4	801.5	804.8
67.5°	58.2	71.1	126.1	169.7	507.4	605.9	635.1	664.2	696.5	712.6	714.2
70°	53.3	67.9	116.3	150.3	442.7	528.4	552.7	583.3	609.2	617.3	622.2
72.5°	50.1	63.0	109.9	135.7	376.6	454.1	476.7	494.5	517.1	525.2	525.2
75°	45.3	56.5	103.4	121.2	308.7	371.7	391.1	408.8	426.6	429.8	425.0
77.5°	40.4	50.1	88.9	101.8	240.8	294.1	310.3	319.9	334.5	337.7	339.3
80°	33.9	43.6	69.5	79.2	174.5	216.5	227.9	235.9	248.9	248.9	252.1
82.5°	25.9	33.9	50.1	56.5	117.9	148.7	158.3	163.2	171.3	171.3	171.3
85°	16.1	21.0	32.3	37.1	71.1	90.5	96.9	98.6	105.0	106.7	106.7
87.5°	8.1	11.3	21.0	22.6	37.1	46.9	46.9	50.1	50.1	48.5	46.9
90°	1.0	1.7	2.5	2.7	4.2	6.2	7.3	6.5	4.9	3.6	3.6
92.5°	3.8	10.3	16.8	18.4	26.0	36.0	41.0	35.9	25.8	18.1	17.4
95°	9.2	21.1	33.0	36.0	63.9	101.0	119.7	106.8	81.0	61.7	59.5
97.5°	15.9	26.4	36.9	39.5	86.0	148.0	179.1	170.9	154.6	142.4	138.2
100°	21.0	30.6	40.1	42.5	94.1	162.9	197.3	197.9	199.1	200.0	195.0
102.5°	25.4	34.3	43.3	45.5	97.8	167.6	202.5	212.9	233.6	249.2	244.9
105°	32.9	40.5	47.9	49.9	100.6	168.1	201.9	225.2	271.7	306.6	304.3
107.5°	40.6	47.6	54.6	56.3	101.0	160.6	190.4	222.9	287.7	336.4	337.0
110°	45.7	52.0	58.4	60.0	100.3	154.0	180.9	217.2	289.7	344.1	346.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	50.8	56.8	62.8	64.4	100.3	148.2	172.2	209.3	283.5	339.2	342.8
115°	58.4	64.0	69.5	71.0	101.2	141.6	161.8	197.5	269.0	322.6	327.7
117.5°	66.0	71.1	76.1	77.4	103.1	137.4	154.6	186.9	251.4	299.8	305.4
120°	70.4	75.2	79.9	81.1	104.6	136.0	151.7	181.2	240.2	284.4	289.8
122.5°	74.7	79.5	84.2	85.5	106.8	135.2	149.5	176.0	229.1	268.9	274.3
125°	81.3	85.7	90.1	91.2	109.8	134.7	147.1	169.6	214.8	248.6	253.6
127.5°	86.6	91.1	95.5	96.6	112.8	134.3	145.1	164.5	203.2	232.3	236.5
130°	89.5	94.3	99.0	100.3	115.0	134.6	144.3	161.6	196.1	221.9	225.8
132.5°	92.5	97.3	102.1	103.2	116.7	134.7	143.6	159.1	189.9	213.2	216.6
135°	96.9	101.2	105.6	106.7	118.6	134.6	142.5	155.4	181.3	200.6	203.6
137.5°	101.4	105.7	110.0	111.1	121.5	135.3	142.3	153.2	175.1	191.5	194.0
140°	105.1	109.1	113.1	114.0	123.2	135.5	141.6	151.1	170.0	184.1	186.4
142.5°	108.0	111.6	115.3	116.2	124.7	136.0	141.6	149.9	166.6	179.0	181.0
145°	112.4	115.6	118.8	119.6	126.6	136.0	140.7	147.5	161.0	171.2	172.8
147.5°	116.8	119.9	123.0	123.8	129.4	136.9	140.7	146.0	156.7	164.7	166.0
150°	119.7	122.4	125.3	126.0	130.8	137.4	140.7	145.2	154.2	161.0	162.0
152.5°	122.6	124.7	126.8	127.4	131.8	137.7	140.7	144.5	152.2	158.1	158.8
155°	127.0	128.5	130.2	130.5	133.9	138.4	140.7	143.7	149.9	154.5	155.0
157.5°	130.3	131.8	133.3	133.7	136.0	139.1	140.7	143.1	147.8	151.4	151.7
160°	132.5	133.6	134.8	135.1	136.9	139.4	140.7	142.7	146.8	149.8	150.0
162.5°	134.7	135.5	136.5	136.7	138.0	139.8	140.7	142.4	145.8	148.4	148.6
165°	137.0	137.8	138.7	138.9	139.4	140.3	140.7	141.9	144.4	146.2	146.4
167.5°	139.2	139.6	140.0	140.1	140.6	141.2	141.6	142.4	144.0	145.3	145.4
170°	140.7	141.1	141.4	141.5	141.5	141.6	141.6	142.4	144.0	145.3	145.3
172.5°	141.4	141.5	141.6	141.6	141.6	141.6	141.6	142.3	143.5	144.5	144.4
175°	142.5	142.5	142.5	142.5	142.2	141.8	141.6	142.0	142.9	143.4	143.4
177.5°	142.5	142.5	142.5	142.5	142.3	142.0	141.8	142.1	142.8	143.2	143.2
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	502.5	502.5
2.5°	536.5	533.3
5°	690.0	693.2
7.5°	929.2	927.6
10°	1155.4	1170.0
12.5°	1320.2	1323.4
15°	1420.5	1426.9
17.5°	1459.2	1460.9
20°	1460.9	1457.6
22.5°	1443.0	1439.9
25°	1422.0	1420.5
27.5°	1402.6	1404.2
30°	1394.6	1399.5
32.5°	1394.6	1402.6
35°	1397.8	1405.9
37.5°	1396.2	1405.9
40°	1389.7	1401.0
42.5°	1372.0	1380.0
45°	1344.4	1354.2
47.5°	1308.9	1315.4
50°	1263.7	1270.1
52.5°	1207.1	1208.7
55°	1139.2	1145.7
57.5°	1066.5	1068.2
60°	985.8	990.6
62.5°	900.1	900.1
65°	809.6	812.8
67.5°	715.9	724.0
70°	620.6	622.2
72.5°	526.8	526.8
75°	429.8	431.5
77.5°	337.7	337.7
80°	250.5	252.1
82.5°	173.0	176.1
85°	108.3	108.3
87.5°	50.1	45.3
90°	3.6	3.6
92.5°	14.5	11.7
95°	50.8	42.0
97.5°	121.6	105.0
100°	175.2	155.4
102.5°	227.9	210.9
105°	295.2	286.0
107.5°	339.2	341.4
110°	355.9	365.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	357.5	372.1
115°	348.0	368.2
117.5°	327.9	350.4
120°	311.7	333.5
122.5°	295.9	317.4
125°	273.4	293.3
127.5°	253.2	269.9
130°	241.2	256.7
132.5°	230.4	244.3
135°	215.6	227.6
137.5°	203.7	213.5
140°	195.5	204.7
142.5°	188.8	196.6
145°	178.7	184.6
147.5°	170.8	175.8
150°	166.0	170.0
152.5°	161.8	164.8
155°	157.0	159.0
157.5°	153.2	154.6
160°	150.9	151.7
162.5°	149.4	150.1
165°	147.3	148.0
167.5°	145.6	146.0
170°	145.3	145.3
172.5°	144.1	143.8
175°	143.4	143.4
177.5°	142.9	142.5
180°	142.5	142.5



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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	8.76	10.07	9.40	10.72	11.46	21.90	23.21	22.53	23.86	24.60
	3H	9.50	10.68	10.15	11.34	12.12	23.76	24.94	24.40	25.60	26.38
	4H	9.82	10.93	10.48	11.60	12.40	24.41	25.53	25.08	26.20	26.99
	6H	10.09	11.12	10.77	11.81	12.62	24.85	25.89	25.53	26.57	27.38
	8H	10.17	11.16	10.86	11.86	12.68	24.98	25.97	25.67	26.67	27.48
	12H	10.21	11.15	10.90	11.85	12.69	25.06	26.00	25.75	26.70	27.54
4H	2H	16.01	17.12	16.67	17.79	18.59	22.23	23.34	22.90	24.02	24.81
	3H	17.62	18.55	18.30	19.26	20.08	24.30	25.24	24.98	25.95	26.76
	4H	17.73	18.58	18.43	19.29	20.14	25.08	25.93	25.77	26.64	27.48
	6H	17.77	18.51	18.48	19.25	20.10	25.63	26.37	26.34	27.11	27.96
	8H	17.76	18.45	18.48	19.19	20.05	25.80	26.49	26.52	27.23	28.09
	12H	17.73	18.36	18.48	19.12	19.99	25.90	26.53	26.65	27.29	28.16
8H	4H	19.20	19.90	19.92	20.63	21.50	25.17	25.87	25.90	26.61	27.47
	6H	19.46	20.04	20.22	20.82	21.69	25.81	26.39	26.56	27.17	28.04
	8H	19.49	20.01	20.25	20.78	21.67	26.03	26.55	26.80	27.33	28.21
	12H	19.48	19.94	20.25	20.70	21.65	26.19	26.64	26.96	27.41	28.36
12H	4H	19.36	19.99	20.11	20.75	21.62	25.15	25.78	25.89	26.54	27.41
	6H	19.73	20.24	20.49	21.02	21.90	25.80	26.32	26.56	27.10	27.98
	8H	19.82	20.27	20.58	21.04	21.99	26.05	26.50	26.81	27.27	28.21