

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: P936461

Luminaire Tested: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

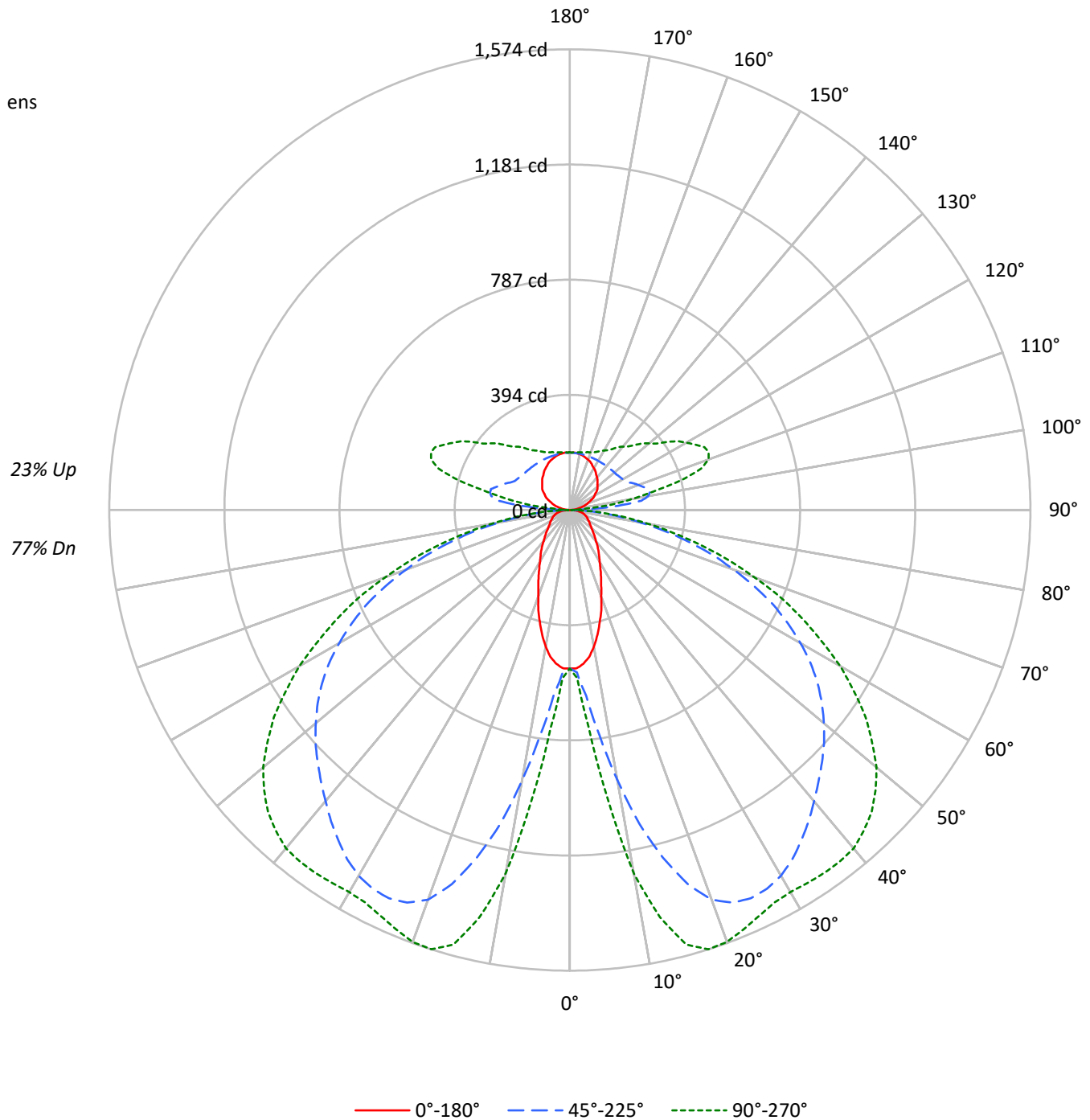
Test Method: LM-79-2019  
Report Number: P936461  
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5463.0 lumens  
Efficiency: N/A  
Efficacy: 93.9 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: Semi-Direct  
  
Input Watts (W): 58.2  
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

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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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3349	3349	3349
5°	3270	3869	4501
10°	2965	5639	7462
15°	2519	7366	9010
20°	2050	8534	9184
25°	1710	8928	8997
30°	1441	8982	8979
35°	1273	8831	9212
40°	1109	8634	9452
45°	1003	8490	9489
50°	920	8359	9332
55°	880	8169	8918
60°	899	7807	8265
65°	934	7258	7367
70°	993	6325	6224
75°	1096	5152	4857
80°	1188	3569	3274
85°	1037	1890	1675

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9489 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.0	1.3
10°-20°	310.3	5.7
20°-30°	542.8	9.9
30°-40°	698.8	12.8
40°-50°	780.5	14.3
50°-60°	747.6	13.7
60°-70°	592.5	10.8
70°-80°	348.4	6.4
80°-90°	97.5	1.8
90°-100°	95.8	1.8
100°-110°	252.0	4.6
110°-120°	261.2	4.8
120°-130°	209.6	3.8
130°-140°	164.4	3.0
140°-150°	126.2	2.3
150°-160°	90.9	1.7
160°-170°	55.6	1.0
170°-180°	18.8	0.3
0°-30°	923.2	16.9
0°-40°	1622.0	29.7
0°-60°	3150.1	57.7
0°-90°	4188.5	76.7
90°-120°	609.0	11.1
90°-150°	1109.2	20.3
90°-180°	1275.0	23.3
0°-180°	5463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	527	566	637	721	747	49
15°	395	729	1229	1490	1537	110
25°	252	827	1464	1528	1530	116
35°	171	790	1379	1457	1514	107
45°	117	630	1218	1396	1459	90
55°	84	400	1034	1201	1234	76
65°	66	212	768	863	876	66
75°	49	130	421	463	465	51
85°	17	40	104	115	117	18
90°	1	4	10	5	5	2
95°	13	50	165	85	58	14
105°	45	69	278	423	394	48
115°	81	98	223	445	508	80
125°	112	126	203	343	404	100
135°	134	147	197	277	314	103
145°	155	165	194	236	255	97
155°	175	180	194	213	219	81
165°	189	192	194	202	204	53
175°	197	197	195	198	198	19
180°	197	197	197	197	197	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3
2.5°	541.3	541.3	544.8	546.6	550.0	551.7	555.3	558.8	569.1	570.9	574.4
5°	527.4	534.4	557.0	565.7	590.0	623.2	637.0	659.7	706.7	720.6	729.3
7.5°	506.5	522.1	577.9	591.8	652.8	739.8	776.3	825.1	899.9	936.4	966.0
10°	473.4	506.5	605.8	638.8	738.0	870.3	938.2	1006.1	1119.2	1169.7	1188.9
12.5°	436.9	490.9	635.4	680.6	823.3	1016.5	1098.3	1173.1	1302.0	1369.9	1380.3
15°	395.1	468.2	663.2	729.3	913.8	1138.4	1228.9	1321.1	1441.2	1489.9	1502.2
17.5°	358.6	450.8	689.3	758.9	983.4	1248.1	1340.3	1416.9	1514.4	1547.4	1556.1
20°	313.3	423.0	706.7	797.2	1056.6	1328.1	1416.9	1476.1	1542.2	1563.1	1566.5
22.5°	280.3	393.4	717.1	811.1	1105.3	1376.8	1451.7	1498.6	1544.0	1550.9	1552.7
25°	252.4	360.3	715.4	826.8	1147.1	1406.4	1463.9	1498.6	1524.8	1528.2	1528.2
27.5°	226.3	323.7	708.4	830.3	1178.4	1413.4	1458.6	1483.0	1495.2	1502.2	1502.2
30°	203.7	289.0	691.0	823.3	1192.3	1406.4	1443.0	1455.2	1467.4	1477.7	1483.0
32.5°	186.3	255.8	664.9	809.4	1194.1	1389.0	1415.1	1422.1	1439.4	1463.9	1472.6
35°	170.6	222.8	635.4	790.2	1183.6	1361.2	1378.6	1385.5	1420.3	1456.9	1469.0
37.5°	154.9	198.4	597.1	757.2	1168.0	1328.1	1340.3	1352.5	1406.4	1449.9	1463.9
40°	139.2	177.5	551.7	720.6	1143.5	1288.0	1298.5	1317.6	1389.0	1439.4	1453.4
42.5°	127.1	160.1	503.0	682.4	1112.3	1242.8	1258.4	1286.3	1368.1	1422.1	1437.8
45°	116.6	142.7	450.8	630.1	1072.2	1195.8	1218.5	1256.8	1343.7	1396.0	1409.9
47.5°	106.2	130.5	396.9	576.2	1028.7	1148.8	1178.4	1221.9	1310.7	1361.2	1373.3
50°	97.5	118.4	342.9	518.7	981.7	1098.3	1133.2	1178.4	1268.9	1315.9	1331.6
52.5°	90.6	107.9	292.4	461.3	927.7	1046.1	1086.1	1133.2	1218.5	1263.7	1274.2
55°	83.5	99.2	248.9	400.3	872.1	990.4	1033.9	1079.2	1162.7	1201.0	1208.0
57.5°	80.1	92.2	212.4	342.9	812.9	927.7	976.5	1018.3	1096.6	1126.2	1133.2
60°	74.8	87.0	184.5	294.1	748.5	868.6	910.4	952.1	1018.3	1042.6	1047.8
62.5°	69.6	83.5	163.6	247.2	682.4	798.9	840.7	879.0	934.7	952.1	959.1
65°	66.1	80.1	148.0	212.4	614.5	725.8	767.6	800.7	846.0	863.4	866.8
67.5°	62.6	76.6	135.8	182.8	546.6	652.8	684.0	715.4	750.2	767.6	769.4
70°	57.4	73.1	125.3	161.9	476.9	569.1	595.3	628.3	656.2	664.9	670.1
72.5°	53.9	67.9	118.4	146.2	405.6	489.1	513.5	532.6	557.0	565.7	565.7
75°	48.7	61.0	111.4	130.5	332.4	400.3	421.2	440.4	459.5	463.0	457.8
77.5°	43.5	53.9	95.7	109.7	259.4	316.8	334.2	344.6	360.3	363.8	365.5
80°	36.5	47.0	74.8	85.3	188.0	233.3	245.4	254.1	268.1	268.1	271.6
82.5°	27.8	36.5	53.9	61.0	127.1	160.1	170.6	175.8	184.5	184.5	184.5
85°	17.4	22.7	34.8	40.1	76.6	97.5	104.4	106.2	113.1	114.9	114.9
87.5°	8.7	12.2	22.7	24.3	40.1	50.5	50.5	53.9	53.9	52.3	50.5
90°	1.3	2.4	3.4	3.7	5.8	8.6	10.0	8.9	6.7	5.0	5.0
92.5°	5.3	14.2	23.2	25.5	35.8	49.6	56.5	49.4	35.5	25.0	24.1
95°	12.6	29.1	45.5	49.6	88.1	139.4	165.0	147.3	111.7	85.1	82.1
97.5°	21.9	36.4	50.9	54.5	118.7	204.2	247.0	235.7	213.3	196.5	190.8
100°	29.1	42.2	55.3	58.6	129.8	224.8	272.2	273.0	274.6	275.9	269.0
102.5°	35.1	47.4	59.6	62.7	134.9	231.2	279.3	293.6	322.2	343.8	337.9
105°	45.4	55.8	66.1	68.8	138.7	231.9	278.5	310.6	374.8	422.9	419.7
107.5°	55.9	65.6	75.3	77.7	139.4	221.6	262.7	307.5	397.0	464.1	464.9
110°	63.1	71.8	80.5	82.7	138.3	212.5	249.5	299.6	399.6	474.6	477.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	70.1	78.4	86.7	88.8	138.3	204.5	237.5	288.7	391.1	467.9	472.9
115°	80.6	88.4	96.0	97.9	139.6	195.2	223.1	272.4	371.1	445.0	452.1
117.5°	91.1	98.0	105.0	106.7	142.2	189.5	213.3	257.8	346.8	413.5	421.2
120°	97.1	103.7	110.2	111.9	144.4	187.7	209.3	250.0	331.3	392.3	399.9
122.5°	103.0	109.7	116.3	118.0	147.4	186.6	206.2	242.9	316.1	371.1	378.5
125°	112.2	118.2	124.3	125.8	151.5	185.8	203.0	234.1	296.3	343.0	349.8
127.5°	119.5	125.6	131.7	133.2	155.5	185.3	200.2	226.9	280.4	320.4	326.2
130°	123.5	130.1	136.6	138.2	158.5	185.6	199.1	222.9	270.4	306.1	311.4
132.5°	127.6	134.2	140.7	142.4	161.0	185.8	198.2	219.5	262.1	294.0	298.7
135°	133.7	139.6	145.6	147.1	163.6	185.7	196.7	214.5	250.1	276.8	281.0
137.5°	139.9	145.8	151.7	153.2	167.6	186.8	196.4	211.5	241.6	264.2	267.5
140°	145.0	150.5	155.9	157.3	170.0	187.0	195.4	208.4	234.5	254.0	257.2
142.5°	149.0	154.0	159.1	160.3	172.0	187.6	195.4	206.8	229.8	246.9	249.6
145°	155.0	159.4	163.8	164.9	174.7	187.6	194.1	203.4	222.1	236.2	238.2
147.5°	161.1	165.4	169.7	170.7	178.6	188.9	194.1	201.5	216.1	227.2	228.9
150°	165.0	168.9	172.8	173.8	180.6	189.6	194.1	200.3	212.7	222.0	223.4
152.5°	169.2	172.1	175.0	175.7	181.9	190.1	194.1	199.4	210.0	218.0	219.0
155°	175.2	177.4	179.6	180.1	184.8	191.0	194.1	198.3	206.8	213.1	213.8
157.5°	179.7	181.8	183.9	184.4	187.7	192.0	194.1	197.4	203.9	208.9	209.4
160°	182.8	184.4	186.0	186.5	189.0	192.4	194.1	196.9	202.5	206.8	207.0
162.5°	185.8	187.0	188.2	188.6	190.4	192.9	194.1	196.5	201.2	204.8	205.1
165°	189.1	190.2	191.3	191.6	192.4	193.6	194.1	195.8	199.2	201.7	202.0
167.5°	192.1	192.6	193.1	193.3	194.0	195.0	195.4	196.6	198.8	200.4	200.5
170°	194.1	194.6	195.2	195.2	195.3	195.4	195.4	196.6	198.8	200.4	200.4
172.5°	195.2	195.2	195.4	195.4	195.4	195.4	195.4	196.3	198.1	199.4	199.3
175°	196.7	196.7	196.7	196.7	196.2	195.7	195.4	195.9	197.1	198.0	198.0
177.5°	196.7	196.7	196.7	196.7	196.3	195.9	195.7	196.1	197.0	197.7	197.6
180°	196.7	196.7	196.7	196.7	196.7	196.7	196.7	196.7	196.7	196.7	196.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	541.3	541.3
2.5°	577.9	574.4
5°	743.2	746.7
7.5°	1000.8	999.2
10°	1244.6	1260.2
12.5°	1422.1	1425.6
15°	1530.0	1536.9
17.5°	1571.8	1573.5
20°	1573.5	1570.1
22.5°	1554.3	1550.9
25°	1531.8	1530.0
27.5°	1510.9	1512.6
30°	1502.2	1507.3
32.5°	1502.2	1510.9
35°	1505.7	1514.4
37.5°	1503.9	1514.4
40°	1496.9	1509.1
42.5°	1477.7	1486.5
45°	1448.2	1458.6
47.5°	1409.9	1416.9
50°	1361.2	1368.1
52.5°	1300.2	1302.0
55°	1227.2	1234.1
57.5°	1148.8	1150.6
60°	1061.8	1067.0
62.5°	969.6	969.6
65°	872.1	875.5
67.5°	771.1	779.8
70°	668.4	670.1
72.5°	567.5	567.5
75°	463.0	464.7
77.5°	363.8	363.8
80°	269.8	271.6
82.5°	186.3	189.7
85°	116.6	116.6
87.5°	53.9	48.7
90°	5.0	5.0
92.5°	20.0	16.1
95°	70.0	58.0
97.5°	167.8	144.7
100°	241.7	214.3
102.5°	314.4	291.0
105°	407.2	394.5
107.5°	467.9	470.9
110°	491.1	504.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	493.1	513.3
115°	480.0	508.0
117.5°	452.3	483.3
120°	430.0	460.1
122.5°	408.2	437.9
125°	377.1	404.5
127.5°	349.3	372.4
130°	332.8	354.1
132.5°	317.9	337.0
135°	297.4	313.9
137.5°	281.1	294.5
140°	269.7	282.4
142.5°	260.4	271.3
145°	246.5	254.7
147.5°	235.7	242.5
150°	229.0	234.5
152.5°	223.2	227.4
155°	216.5	219.3
157.5°	211.3	213.3
160°	208.2	209.3
162.5°	206.1	207.2
165°	203.2	204.3
167.5°	201.0	201.5
170°	200.4	200.4
172.5°	198.8	198.5
175°	198.0	198.0
177.5°	197.1	196.7
180°	196.7	196.7



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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	7.33	8.57	8.01	9.27	10.10	20.50	21.73	21.18	22.44	23.26
	3H	8.06	9.18	8.76	9.89	10.75	22.36	23.47	23.05	24.19	25.05
	4H	8.38	9.43	9.09	10.16	11.03	23.01	24.07	23.73	24.79	25.67
	6H	8.65	9.62	9.37	10.36	11.25	23.46	24.44	24.19	25.17	26.06
	8H	8.73	9.66	9.46	10.41	11.30	23.59	24.52	24.33	25.28	26.17
	12H	8.76	9.65	9.50	10.40	11.32	23.67	24.56	24.41	25.31	26.23
4H	2H	14.58	15.63	15.30	16.36	17.23	20.81	21.87	21.53	22.59	23.47
	3H	16.18	17.07	16.91	17.83	18.72	22.89	23.77	23.62	24.53	25.43
	4H	16.29	17.10	17.04	17.86	18.78	23.67	24.47	24.41	25.24	26.16
	6H	16.33	17.03	17.09	17.82	18.74	24.22	24.93	24.99	25.71	26.64
	8H	16.31	16.97	17.08	17.75	18.70	24.39	25.05	25.16	25.84	26.78
	12H	16.29	16.88	17.08	17.69	18.63	24.50	25.10	25.29	25.90	26.85
8H	4H	17.77	18.42	18.53	19.21	20.15	23.76	24.42	24.53	25.20	26.14
	6H	18.03	18.57	18.82	19.40	20.34	24.40	24.95	25.20	25.77	26.72
	8H	18.05	18.54	18.86	19.36	20.32	24.62	25.11	25.43	25.94	26.89
	12H	18.04	18.47	18.85	19.28	20.30	24.78	25.21	25.60	26.03	27.05
12H	4H	17.93	18.52	18.72	19.33	20.27	23.73	24.32	24.52	25.13	26.08
	6H	18.29	18.78	19.10	19.60	20.56	24.39	24.88	25.20	25.70	26.66
	8H	18.38	18.81	19.19	19.62	20.64	24.64	25.07	25.45	25.88	26.90