

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: P937318

Luminaire Tested: SQ4-FB-075U-125D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

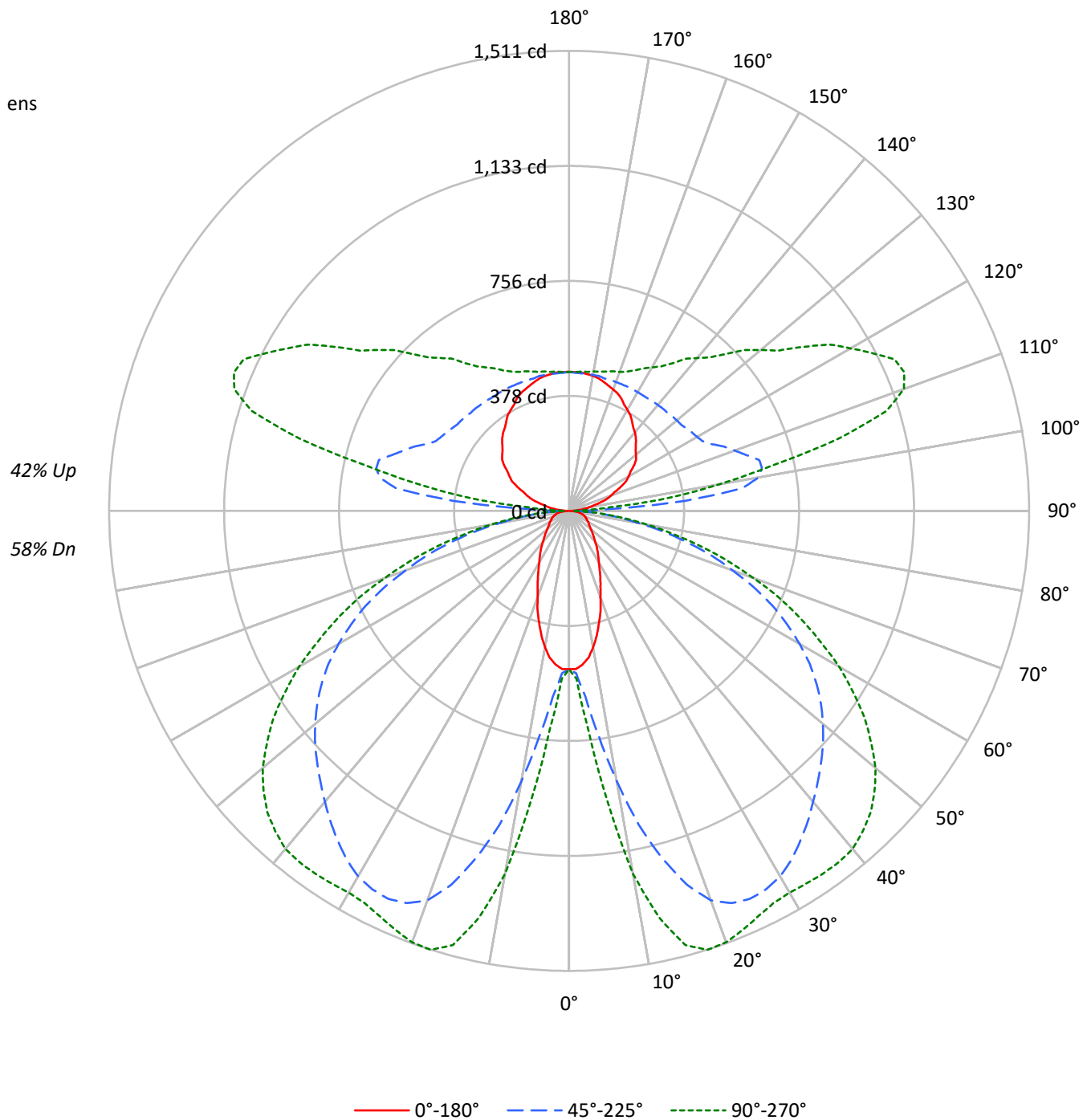
Test Method: LM-79-2019  
Report Number: P937318  
REPORT IS A COMBINATION OF REPORTS P933504 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6982.2 lumens  
Efficiency: N/A  
Efficacy: 112.6 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): 62  
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	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	17	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

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

	0°	45°	90°
0°	4824	4824	4824
5°	4708	5572	6485
10°	4266	8116	10751
15°	3621	10596	12982
20°	2945	12271	13231
25°	2454	12831	12962
30°	2066	12902	12937
35°	1824	12677	13271
40°	1587	12389	13617
45°	1434	12174	13671
50°	1314	11979	13444
55°	1253	11696	12848
60°	1279	11169	11908
65°	1323	10371	10614
70°	1399	9027	8968
75°	1535	7341	6998
80°	1643	5072	4715
85°	1383	2677	2413

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13671 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	1.0
10°-20°	298.1	4.3
20°-30°	521.4	7.5
30°-40°	671.2	9.6
40°-50°	749.7	10.7
50°-60°	718.0	10.3
60°-70°	569.0	8.1
70°-80°	334.6	4.8
80°-90°	94.7	1.4
90°-100°	222.5	3.2
100°-110°	584.8	8.4
110°-120°	606.4	8.7
120°-130°	486.4	7.0
130°-140°	381.7	5.5
140°-150°	292.9	4.2
150°-160°	211.0	3.0
160°-170°	129.1	1.8
170°-180°	43.6	0.6
0°-30°	886.7	12.7
0°-40°	1557.9	22.3
0°-60°	3025.6	43.3
0°-90°	4023.9	57.6
90°-120°	1413.7	20.2
90°-150°	2574.7	36.9
90°-180°	2958.0	42.4
0°-180°	6982.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	506	543	612	692	717	47
15°	380	700	1180	1431	1476	106
25°	242	794	1406	1468	1470	112
35°	164	759	1324	1399	1454	102
45°	112	605	1170	1341	1401	87
55°	80	384	993	1154	1185	73
65°	64	204	737	829	841	63
75°	47	125	405	445	446	49
85°	17	38	100	110	112	18
90°	3	9	23	12	12	4
95°	29	115	383	198	134	33
105°	105	160	646	982	916	112
115°	187	227	518	1033	1179	185
125°	260	292	471	796	939	231
135°	310	342	456	643	729	240
145°	360	383	450	548	591	225
155°	407	418	450	495	509	187
165°	439	445	450	468	474	124
175°	456	456	454	459	459	43
180°	456	456	456	456	456	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9
2.5°	519.9	519.9	523.2	524.9	528.3	530.0	533.3	536.7	546.7	548.3	551.7
5°	506.5	513.3	535.0	543.3	566.7	598.5	611.9	633.6	678.8	692.1	700.5
7.5°	486.5	501.5	555.1	568.4	626.9	710.5	745.6	792.5	864.3	899.4	927.8
10°	454.7	486.5	581.7	613.5	708.8	835.8	901.1	966.3	1074.9	1123.5	1141.8
12.5°	419.6	471.5	610.2	653.7	790.8	976.3	1054.9	1126.8	1250.5	1315.7	1325.7
15°	379.5	449.7	637.0	700.5	877.6	1093.3	1180.3	1268.9	1384.3	1431.0	1442.8
17.5°	344.4	433.0	662.1	728.9	944.5	1198.6	1287.3	1360.9	1454.4	1486.2	1494.5
20°	300.9	406.3	678.8	765.7	1014.8	1275.6	1360.9	1417.7	1481.2	1501.3	1504.6
22.5°	269.1	377.8	688.7	779.0	1061.6	1322.3	1394.3	1439.4	1482.9	1489.6	1491.2
25°	242.5	346.1	687.2	794.1	1101.7	1350.8	1406.0	1439.4	1464.5	1467.9	1467.9
27.5°	217.4	310.9	680.4	797.4	1131.8	1357.5	1401.0	1424.4	1436.1	1442.8	1442.8
30°	195.6	277.5	663.7	790.8	1145.2	1350.8	1385.9	1397.6	1409.3	1419.4	1424.4
32.5°	178.9	245.7	638.6	777.4	1146.9	1334.1	1359.2	1365.8	1382.6	1406.0	1414.3
35°	163.8	214.0	610.2	759.0	1136.8	1307.3	1324.0	1330.7	1364.1	1399.3	1411.0
37.5°	148.8	190.6	573.4	727.3	1121.8	1275.6	1287.3	1299.0	1350.8	1392.6	1406.0
40°	133.8	170.5	530.0	692.1	1098.4	1237.1	1247.2	1265.5	1334.1	1382.6	1395.9
42.5°	122.0	153.8	483.1	655.3	1068.2	1193.7	1208.7	1235.5	1314.0	1365.8	1380.9
45°	112.0	137.1	433.0	605.2	1029.8	1148.6	1170.3	1207.0	1290.6	1340.8	1354.2
47.5°	102.0	125.4	381.2	553.4	988.0	1103.4	1131.8	1173.6	1258.8	1307.3	1319.1
50°	93.7	113.7	329.3	498.1	942.8	1054.9	1088.4	1131.8	1218.7	1263.8	1279.0
52.5°	86.9	103.6	280.9	443.0	891.1	1004.7	1043.2	1088.4	1170.3	1213.8	1223.7
55°	80.2	95.2	239.1	384.5	837.5	951.2	993.0	1036.5	1116.7	1153.5	1160.2
57.5°	76.9	88.6	203.9	329.3	780.7	891.1	937.9	978.0	1053.2	1081.7	1088.4
60°	71.9	83.6	177.2	282.6	718.9	834.3	874.4	914.5	978.0	1001.4	1006.4
62.5°	66.9	80.2	157.2	237.4	655.3	767.4	807.5	844.2	897.8	914.5	921.1
65°	63.5	76.9	142.1	203.9	590.1	697.1	737.2	769.1	812.5	829.2	832.6
67.5°	60.2	73.6	130.4	175.6	524.9	626.9	657.0	687.2	720.5	737.2	738.9
70°	55.1	70.2	120.3	155.5	458.0	546.7	571.8	603.5	630.2	638.6	643.7
72.5°	51.9	65.2	113.7	140.4	389.6	469.8	493.2	511.6	535.0	543.3	543.3
75°	46.8	58.5	107.0	125.4	319.3	384.5	404.6	423.0	441.3	444.7	439.7
77.5°	41.8	51.9	92.0	105.3	249.1	304.3	321.0	331.0	346.1	349.4	351.0
80°	35.1	45.2	71.9	81.9	180.5	224.0	235.7	244.0	257.5	257.5	260.8
82.5°	26.8	35.1	51.9	58.5	122.0	153.8	163.8	168.8	177.2	177.2	177.2
85°	16.7	21.7	33.4	38.4	73.6	93.7	100.3	102.0	108.7	110.4	110.4
87.5°	8.4	11.7	21.7	23.4	38.4	48.5	48.5	51.9	51.9	50.2	48.5
90°	3.1	5.5	8.0	8.6	13.5	20.1	23.3	20.7	15.5	11.7	11.7
92.5°	12.3	33.1	53.8	59.1	83.1	115.1	131.1	114.9	82.5	58.2	55.9
95°	29.4	67.6	105.7	115.2	204.5	323.6	383.1	341.8	259.4	197.5	190.5
97.5°	50.9	84.5	118.1	126.5	275.5	474.0	573.3	547.3	495.2	456.1	442.7
100°	67.4	97.8	128.3	135.9	301.2	521.7	631.8	633.7	637.6	640.4	624.5
102.5°	81.5	110.0	138.3	145.4	313.1	536.7	648.4	681.6	748.0	797.8	784.2
105°	105.3	129.4	153.5	159.6	321.9	538.4	646.5	721.0	869.9	981.6	974.3
107.5°	129.8	152.3	174.8	180.4	323.6	514.4	609.8	713.6	921.3	1077.1	1078.9
110°	146.4	166.7	187.0	192.1	321.1	493.1	579.2	695.3	927.4	1101.6	1109.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	162.6	182.0	201.3	206.1	321.2	474.6	551.3	670.2	907.8	1086.0	1097.8
115°	187.1	204.9	222.8	227.2	324.2	453.3	517.9	632.4	861.3	1033.1	1049.3
117.5°	211.3	227.5	243.7	247.8	330.2	440.0	494.9	598.2	804.8	959.8	977.8
120°	225.5	240.7	255.9	259.7	335.0	435.5	485.7	580.2	769.0	910.5	928.0
122.5°	239.2	254.6	269.9	273.8	342.0	433.1	478.7	563.7	733.7	861.2	878.5
125°	260.3	274.4	288.4	291.9	351.6	431.3	471.1	543.3	687.7	796.0	811.9
127.5°	277.5	291.7	305.8	309.3	361.1	430.2	464.7	526.7	650.7	743.7	757.1
130°	286.7	301.9	317.1	321.0	368.0	430.8	462.2	517.4	627.8	710.6	722.9
132.5°	296.2	311.4	326.6	330.5	373.7	431.3	460.0	509.4	608.3	682.4	693.5
135°	310.2	324.1	338.0	341.5	379.8	430.9	456.4	497.8	580.5	642.6	652.2
137.5°	324.7	338.4	352.1	355.6	389.0	433.5	455.8	490.7	560.7	613.2	621.0
140°	336.6	349.3	361.9	365.1	394.6	433.9	453.6	483.8	544.2	589.5	596.9
142.5°	345.8	357.5	369.1	372.1	399.3	435.5	453.6	480.2	533.2	573.0	579.4
145°	359.8	370.1	380.3	382.8	405.4	435.5	450.5	472.3	515.6	548.2	553.0
147.5°	374.0	383.8	393.8	396.3	414.4	438.5	450.5	467.6	501.8	527.4	531.3
150°	383.1	392.1	401.1	403.4	419.1	440.1	450.5	465.0	493.8	515.4	518.6
152.5°	392.6	399.4	406.3	407.9	422.2	441.0	450.5	462.9	487.5	506.0	508.3
155°	406.8	411.8	416.7	418.0	428.9	443.3	450.5	460.3	479.9	494.6	496.2
157.5°	417.1	422.1	427.0	428.2	435.6	445.6	450.5	458.1	473.4	484.8	485.9
160°	424.1	428.0	431.8	432.7	438.7	446.6	450.5	457.0	470.2	480.0	480.6
162.5°	431.3	434.1	437.0	437.7	441.9	447.7	450.5	456.1	467.0	475.3	475.9
165°	438.9	441.4	444.0	444.7	446.7	449.2	450.5	454.5	462.4	468.3	469.0
167.5°	445.9	447.1	448.4	448.7	450.3	452.5	453.6	456.2	461.4	465.2	465.5
170°	450.5	451.7	453.0	453.3	453.4	453.5	453.6	456.2	461.4	465.2	465.2
172.5°	453.0	453.3	453.5	453.6	453.6	453.6	453.6	455.7	459.7	462.8	462.6
175°	456.4	456.4	456.4	456.4	455.5	454.2	453.6	454.9	457.4	459.4	459.4
177.5°	456.4	456.4	456.4	456.4	455.7	454.7	454.2	455.2	457.2	458.8	458.5
180°	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4	456.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	519.9	519.9
2.5°	555.1	551.7
5°	713.8	717.2
7.5°	961.3	959.6
10°	1195.3	1210.4
12.5°	1365.8	1369.2
15°	1469.6	1476.2
17.5°	1509.7	1511.3
20°	1511.3	1508.0
22.5°	1492.9	1489.6
25°	1471.1	1469.6
27.5°	1451.1	1452.8
30°	1442.8	1447.8
32.5°	1442.8	1451.1
35°	1446.1	1454.4
37.5°	1444.5	1454.4
40°	1437.7	1449.4
42.5°	1419.4	1427.7
45°	1390.9	1401.0
47.5°	1354.2	1360.9
50°	1307.3	1314.0
52.5°	1248.8	1250.5
55°	1178.6	1185.3
57.5°	1103.4	1105.1
60°	1019.8	1024.9
62.5°	931.2	931.2
65°	837.5	840.9
67.5°	740.6	749.0
70°	642.0	643.7
72.5°	545.0	545.0
75°	444.7	446.4
77.5°	349.4	349.4
80°	259.2	260.8
82.5°	178.9	182.2
85°	112.0	112.0
87.5°	51.9	46.8
90°	11.7	11.7
92.5°	46.6	37.3
95°	162.5	134.5
97.5°	389.4	336.0
100°	561.0	497.4
102.5°	729.7	675.3
105°	945.0	915.8
107.5°	1086.0	1093.1
110°	1139.8	1170.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1144.6	1191.4
115°	1114.3	1179.2
117.5°	1049.8	1121.9
120°	998.0	1067.9
122.5°	947.5	1016.6
125°	875.5	939.0
127.5°	810.7	864.3
130°	772.5	822.0
132.5°	737.8	782.2
135°	690.4	728.6
137.5°	652.3	683.6
140°	626.2	655.4
142.5°	604.5	629.7
145°	572.1	591.1
147.5°	547.2	563.0
150°	531.4	544.3
152.5°	518.0	527.7
155°	502.6	509.0
157.5°	490.4	494.9
160°	483.1	485.7
162.5°	478.4	480.9
165°	471.6	474.1
167.5°	466.6	467.7
170°	465.2	465.2
172.5°	461.6	460.6
175°	459.4	459.4
177.5°	457.4	456.4
180°	456.4	456.4



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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	7.12	8.10	8.00	9.01	10.17	20.26	21.24	21.14	22.15	23.31
	3H	7.84	8.72	8.73	9.64	10.82	22.10	22.98	22.99	23.90	25.08
	4H	8.14	8.98	9.05	9.90	11.09	22.74	23.57	23.64	24.50	25.68
	6H	8.40	9.17	9.32	10.10	11.30	23.16	23.93	24.08	24.86	26.06
	8H	8.47	9.21	9.40	10.16	11.36	23.28	24.02	24.21	24.96	26.16
	12H	8.50	9.20	9.43	10.14	11.36	23.35	24.05	24.28	24.99	26.21
4H	2H	14.33	15.17	15.24	16.09	17.28	20.55	21.39	21.47	22.31	23.50
	3H	15.91	16.61	16.83	17.56	18.77	22.60	23.30	23.52	24.25	25.45
	4H	16.01	16.65	16.95	17.60	18.83	23.36	24.00	24.29	24.95	26.17
	6H	16.03	16.58	16.98	17.56	18.78	23.89	24.45	24.84	25.42	26.65
	8H	16.01	16.53	16.96	17.49	18.74	24.05	24.57	25.00	25.53	26.78
	12H	15.97	16.44	16.94	17.42	18.67	24.14	24.61	25.11	25.59	26.84
8H	4H	17.46	17.97	18.41	18.94	20.18	23.43	23.95	24.38	24.91	26.16
	6H	17.70	18.13	18.68	19.14	20.38	24.05	24.48	25.03	25.49	26.73
	8H	17.72	18.10	18.71	19.10	20.36	24.27	24.65	25.25	25.64	26.90
	12H	17.70	18.03	18.69	19.02	20.33	24.41	24.74	25.40	25.73	27.04
12H	4H	17.60	18.07	18.57	19.05	20.30	23.39	23.86	24.36	24.84	26.09
	6H	17.96	18.34	18.95	19.34	20.60	24.04	24.42	25.02	25.41	26.67
	8H	18.04	18.37	19.03	19.36	20.67	24.27	24.60	25.26	25.59	26.90