

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: P938170

Luminaire Tested: SQ4-FB-125U-125D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938170
REPORT IS A COMBINATION OF REPORTS P933600 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

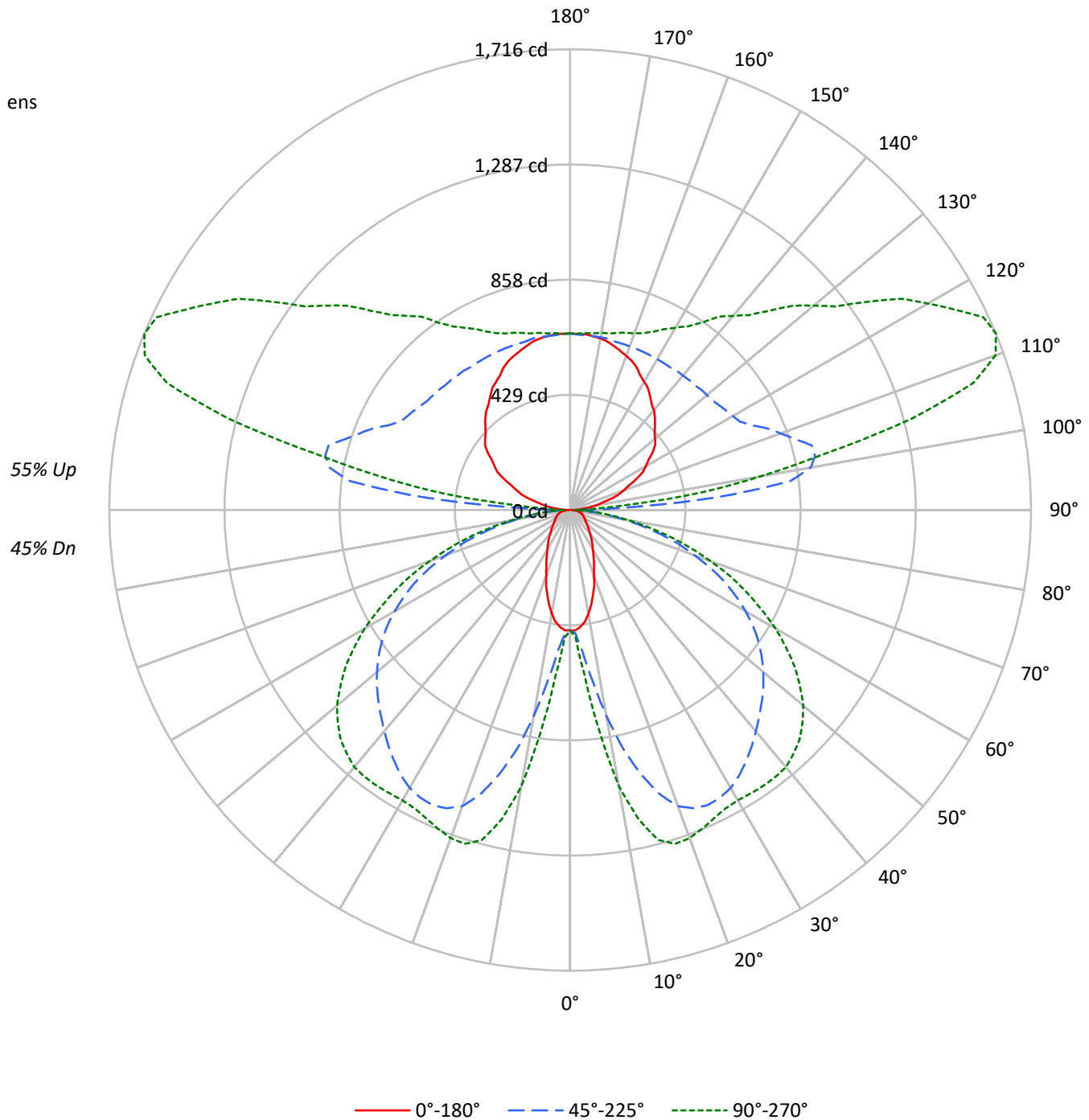
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7731.9 lumens
Efficiency: N/A
Efficacy: 102.8 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): 75.2
Input Voltage (V): NR
Input Current (A_{in}): 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				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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4160	4160	4160
5°	4060	4805	5592
10°	3678	6998	9271
15°	3123	9137	11195
20°	2539	10581	11409
25°	2116	11065	11178
30°	1782	11125	11156
35°	1573	10932	11444
40°	1369	10683	11743
45°	1237	10498	11789
50°	1133	10330	11594
55°	1081	10086	11079
60°	1103	9631	10269
65°	1142	8944	9153
70°	1206	7785	7733
75°	1325	6331	6034
80°	1413	4375	4066
85°	1192	2309	2081

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11789 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	0.8
10°-20°	257.0	3.3
20°-30°	449.6	5.8
30°-40°	578.8	7.5
40°-50°	646.5	8.4
50°-60°	619.2	8.0
60°-70°	490.7	6.3
70°-80°	288.5	3.7
80°-90°	82.7	1.1
90°-100°	320.4	4.1
100°-110°	842.3	10.9
110°-120°	873.4	11.3
120°-130°	700.6	9.1
130°-140°	549.7	7.1
140°-150°	421.9	5.5
150°-160°	303.9	3.9
160°-170°	185.9	2.4
170°-180°	62.8	0.8
0°-30°	764.7	9.9
0°-40°	1343.4	17.4
0°-60°	2609.1	33.7
0°-90°	3471.0	44.9
90°-120°	2036.1	26.3
90°-150°	3708.3	48.0
90°-180°	4261.0	55.1
0°-180°	7731.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	437	468	528	597	618	40
15°	327	604	1018	1234	1273	91
25°	209	685	1212	1266	1267	96
35°	141	654	1142	1207	1254	88
45°	97	522	1009	1156	1208	75
55°	69	332	856	995	1022	63
65°	55	176	636	715	725	54
75°	40	108	349	384	385	42
85°	14	33	86	95	97	15
90°	4	12	34	17	17	5
95°	42	166	552	285	194	47
105°	152	230	931	1414	1319	161
115°	270	327	746	1488	1698	266
125°	375	420	678	1146	1352	333
135°	447	492	657	926	1049	346
145°	518	551	649	790	851	325
155°	586	602	649	712	733	269
165°	632	640	649	674	683	178
175°	657	657	653	662	662	62
180°	657	657	657	657	657	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
2.5°	448.3	448.3	451.2	452.7	455.6	457.0	459.9	462.8	471.4	472.9	475.8
5°	436.8	442.6	461.4	468.5	488.7	516.1	527.6	546.4	585.3	596.8	604.1
7.5°	419.5	432.5	478.7	490.2	540.6	612.7	643.0	683.4	745.3	775.6	800.1
10°	392.1	419.5	501.7	529.1	611.2	720.8	777.0	833.3	927.0	968.8	984.7
12.5°	361.8	406.6	526.2	563.7	681.9	841.9	909.7	971.7	1078.4	1134.6	1143.2
15°	327.3	387.8	549.3	604.1	756.8	942.8	1017.8	1094.2	1193.7	1234.0	1244.2
17.5°	297.0	373.4	570.9	628.6	814.5	1033.6	1110.1	1173.5	1254.2	1281.7	1288.8
20°	259.5	350.3	585.3	660.3	875.1	1100.0	1173.5	1222.5	1277.3	1294.6	1297.5
22.5°	232.1	325.8	593.9	671.8	915.5	1140.3	1202.3	1241.3	1278.8	1284.6	1285.9
25°	209.1	298.5	592.6	684.8	950.1	1164.9	1212.5	1241.3	1262.9	1265.8	1265.8
27.5°	187.4	268.1	586.8	687.6	976.0	1170.6	1208.1	1228.3	1238.4	1244.2	1244.2
30°	168.7	239.3	572.4	681.9	987.6	1164.9	1195.1	1205.2	1215.3	1224.0	1228.3
32.5°	154.3	211.9	550.7	670.4	989.0	1150.5	1172.1	1177.8	1192.3	1212.5	1219.6
35°	141.3	184.5	526.2	654.5	980.3	1127.4	1141.8	1147.6	1176.4	1206.7	1216.7
37.5°	128.3	164.4	494.5	627.2	967.4	1100.0	1110.1	1120.2	1164.9	1200.9	1212.5
40°	115.4	147.1	457.0	596.8	947.2	1066.8	1075.5	1091.3	1150.5	1192.3	1203.8
42.5°	105.2	132.7	416.6	565.1	921.2	1029.4	1042.3	1065.4	1133.2	1177.8	1190.8
45°	96.6	118.3	373.4	521.8	888.0	990.4	1009.2	1040.9	1113.0	1156.2	1167.8
47.5°	87.9	108.1	328.7	477.2	852.0	951.5	976.0	1012.1	1085.5	1127.4	1137.5
50°	80.8	98.1	284.0	429.6	813.1	909.7	938.6	976.0	1050.9	1089.9	1102.9
52.5°	75.0	89.4	242.2	382.0	768.4	866.4	899.6	938.6	1009.2	1046.7	1055.3
55°	69.2	82.1	206.2	331.6	722.2	820.3	856.3	893.8	963.0	994.7	1000.5
57.5°	66.3	76.4	175.9	284.0	673.3	768.4	808.8	843.4	908.2	932.8	938.6
60°	62.0	72.1	152.8	243.7	619.9	719.4	754.0	788.6	843.4	863.6	867.8
62.5°	57.7	69.2	135.6	204.7	565.1	661.7	696.3	728.0	774.2	788.6	794.3
65°	54.8	66.3	122.5	175.9	508.9	601.2	635.8	663.2	700.7	715.1	718.0
67.5°	51.9	63.5	112.5	151.4	452.7	540.6	566.6	592.6	621.4	635.8	637.2
70°	47.5	60.6	103.8	134.1	395.0	471.4	493.1	520.4	543.5	550.7	555.1
72.5°	44.7	56.2	98.1	121.1	335.9	405.1	425.3	441.2	461.4	468.5	468.5
75°	40.4	50.4	92.3	108.1	275.4	331.6	348.9	364.7	380.6	383.5	379.1
77.5°	36.0	44.7	79.3	90.8	214.8	262.4	276.8	285.4	298.5	301.3	302.7
80°	30.2	38.9	62.0	70.6	155.7	193.1	203.3	210.4	222.0	222.0	224.9
82.5°	23.1	30.2	44.7	50.4	105.2	132.7	141.3	145.6	152.8	152.8	152.8
85°	14.4	18.7	28.8	33.1	63.5	80.8	86.5	87.9	93.7	95.2	95.2
87.5°	7.2	10.1	18.7	20.2	33.1	41.8	41.8	44.7	44.7	43.3	41.8
90°	4.4	7.9	11.5	12.4	19.4	28.8	33.5	29.7	22.3	16.8	16.8
92.5°	17.6	47.6	77.6	85.1	119.7	165.8	188.8	165.5	118.9	83.8	80.5
95°	42.3	97.2	152.2	165.9	294.5	466.0	551.8	492.5	373.7	284.6	274.4
97.5°	73.2	121.6	170.1	182.2	396.7	682.7	825.8	788.2	713.1	656.8	637.6
100°	97.0	141.0	184.9	195.9	433.9	751.3	910.0	912.7	918.3	922.4	899.5
102.5°	117.3	158.3	199.3	209.5	451.0	772.9	933.9	981.8	1077.4	1149.2	1129.6
105°	151.7	186.5	221.2	229.9	463.7	775.4	931.2	1038.5	1253.0	1413.8	1403.2
107.5°	187.0	219.4	251.8	259.9	466.0	740.9	878.3	1027.9	1327.1	1551.4	1554.0
110°	210.9	240.1	269.2	276.6	462.5	710.3	834.2	1001.4	1335.9	1586.8	1597.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	234.2	262.1	289.9	296.8	462.6	683.6	794.1	965.2	1307.6	1564.3	1581.1
115°	269.5	295.2	320.9	327.3	466.9	652.9	745.9	910.8	1240.6	1487.9	1511.3
117.5°	304.4	327.8	351.1	356.9	475.6	633.8	712.9	861.6	1159.2	1382.5	1408.4
120°	324.7	346.7	368.7	374.1	482.7	627.3	699.7	835.6	1107.5	1311.5	1336.7
122.5°	344.5	366.7	388.9	394.4	492.8	623.9	689.5	812.0	1056.8	1240.4	1265.3
125°	375.0	395.2	415.4	420.4	506.4	621.1	678.4	782.5	990.4	1146.5	1169.4
127.5°	399.7	420.0	440.4	445.5	520.1	619.5	669.2	758.5	937.1	1071.0	1090.4
130°	412.9	434.9	456.8	462.3	530.1	620.5	665.7	745.2	904.1	1023.4	1041.2
132.5°	426.6	448.6	470.6	476.0	538.2	621.1	662.6	733.7	876.1	982.9	998.8
135°	446.9	466.9	486.8	491.9	547.0	620.5	657.3	717.0	836.2	925.5	939.3
137.5°	467.6	487.3	507.2	512.1	560.2	624.3	656.4	706.7	807.5	883.1	894.3
140°	484.8	503.0	521.3	525.9	568.4	625.0	653.3	696.9	783.9	849.2	859.8
142.5°	498.0	514.9	531.7	536.0	575.1	627.2	653.3	691.6	768.0	825.3	834.4
145°	518.4	533.0	547.8	551.4	583.9	627.2	648.9	680.2	742.7	789.6	796.5
147.5°	538.6	552.9	567.3	570.8	596.8	631.5	648.9	673.5	722.8	759.6	765.4
150°	551.8	564.8	577.7	581.0	603.6	633.8	648.9	669.7	711.2	742.4	747.0
152.5°	565.6	575.4	585.2	587.6	608.1	635.3	648.9	666.6	702.1	728.7	732.2
155°	585.8	593.1	600.3	602.1	617.7	638.5	648.9	663.0	691.2	712.4	714.7
157.5°	600.8	607.9	614.9	616.7	627.4	641.7	648.9	659.9	681.9	698.3	699.9
160°	611.0	616.4	622.0	623.3	631.8	643.2	648.9	658.3	677.1	691.2	692.2
162.5°	621.1	625.2	629.4	630.4	636.5	644.8	648.9	656.8	672.7	684.7	685.5
165°	632.1	635.8	639.6	640.5	643.3	647.0	648.9	654.6	665.9	674.4	675.4
167.5°	642.3	644.0	645.8	646.2	648.6	651.8	653.3	657.1	664.5	670.1	670.5
170°	648.9	650.7	652.5	652.9	653.1	653.2	653.3	657.1	664.5	670.1	670.1
172.5°	652.5	652.8	653.2	653.3	653.3	653.3	653.3	656.2	662.1	666.5	666.2
175°	657.3	657.3	657.3	657.3	656.0	654.2	653.3	655.2	658.9	661.7	661.7
177.5°	657.3	657.3	657.3	657.3	656.3	654.8	654.2	655.6	658.6	660.8	660.4
180°	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	448.3	448.3
2.5°	478.7	475.8
5°	615.6	618.5
7.5°	829.0	827.5
10°	1030.7	1043.8
12.5°	1177.8	1180.7
15°	1267.3	1273.0
17.5°	1301.9	1303.3
20°	1303.3	1300.4
22.5°	1287.4	1284.6
25°	1268.6	1267.3
27.5°	1251.3	1252.8
30°	1244.2	1248.5
32.5°	1244.2	1251.3
35°	1247.1	1254.2
37.5°	1245.6	1254.2
40°	1239.8	1249.9
42.5°	1224.0	1231.1
45°	1199.4	1208.1
47.5°	1167.8	1173.5
50°	1127.4	1133.2
52.5°	1076.9	1078.4
55°	1016.4	1022.1
57.5°	951.5	953.0
60°	879.4	883.8
62.5°	803.0	803.0
65°	722.2	725.1
67.5°	638.7	645.9
70°	553.6	555.1
72.5°	470.0	470.0
75°	383.5	384.9
77.5°	301.3	301.3
80°	223.5	224.9
82.5°	154.3	157.1
85°	96.6	96.6
87.5°	44.7	40.4
90°	16.8	16.8
92.5°	67.1	53.8
95°	234.0	193.7
97.5°	560.8	483.9
100°	808.0	716.4
102.5°	1051.1	972.7
105°	1361.2	1319.0
107.5°	1564.2	1574.4
110°	1641.6	1685.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1648.5	1716.0
115°	1604.8	1698.4
117.5°	1512.1	1615.8
120°	1437.4	1538.2
122.5°	1364.6	1464.1
125°	1260.9	1352.5
127.5°	1167.6	1244.9
130°	1112.6	1184.0
132.5°	1062.7	1126.6
135°	994.4	1049.4
137.5°	939.5	984.6
140°	901.8	944.0
142.5°	870.7	907.0
145°	824.0	851.4
147.5°	788.0	810.8
150°	765.5	783.9
152.5°	746.1	760.1
155°	723.9	733.1
157.5°	706.4	712.9
160°	695.9	699.7
162.5°	689.1	692.6
165°	679.1	682.9
167.5°	672.1	673.6
170°	670.1	670.1
172.5°	664.8	663.5
175°	661.7	661.7
177.5°	658.9	657.3
180°	657.3	657.3



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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	5.46	6.31	6.45	7.32	8.66	18.60	19.45	19.59	20.46	21.80
	3H	6.17	6.93	7.17	7.95	9.31	20.42	21.19	21.42	22.20	23.56
	4H	6.46	7.19	7.48	8.21	9.58	21.06	21.78	22.07	22.80	24.17
	6H	6.71	7.38	7.74	8.41	9.79	21.47	22.14	22.50	23.17	24.55
	8H	6.78	7.42	7.81	8.46	9.84	21.59	22.22	22.62	23.27	24.64
	12H	6.80	7.40	7.84	8.44	9.84	21.65	22.25	22.69	23.29	24.69
4H	2H	12.65	13.37	13.67	14.39	15.76	18.87	19.60	19.89	20.62	21.99
	3H	14.22	14.82	15.25	15.87	17.25	20.90	21.51	21.93	22.56	23.94
	4H	14.31	14.87	15.35	15.91	17.31	21.66	22.21	22.70	23.26	24.66
	6H	14.32	14.80	15.37	15.87	17.27	22.18	22.66	23.23	23.73	25.13
	8H	14.30	14.75	15.35	15.80	17.22	22.34	22.79	23.39	23.84	25.26
	12H	14.26	14.66	15.32	15.73	17.15	22.42	22.83	23.49	23.90	25.32
8H	4H	15.75	16.19	16.80	17.25	18.67	21.72	22.17	22.77	23.22	24.64
	6H	15.99	16.36	17.06	17.46	18.87	22.33	22.71	23.41	23.81	25.22
	8H	16.01	16.33	17.09	17.41	18.85	22.55	22.87	23.63	23.96	25.39
	12H	15.97	16.26	17.06	17.34	18.81	22.68	22.97	23.77	24.05	25.52
12H	4H	15.89	16.29	16.95	17.36	18.78	21.67	22.08	22.74	23.15	24.57
	6H	16.24	16.57	17.32	17.65	19.08	22.32	22.65	23.40	23.73	25.16
	8H	16.31	16.60	17.40	17.68	19.15	22.54	22.83	23.63	23.91	25.38