

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: P938510

Luminaire Tested: SQ4-FB-150U-125D-830-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938510
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

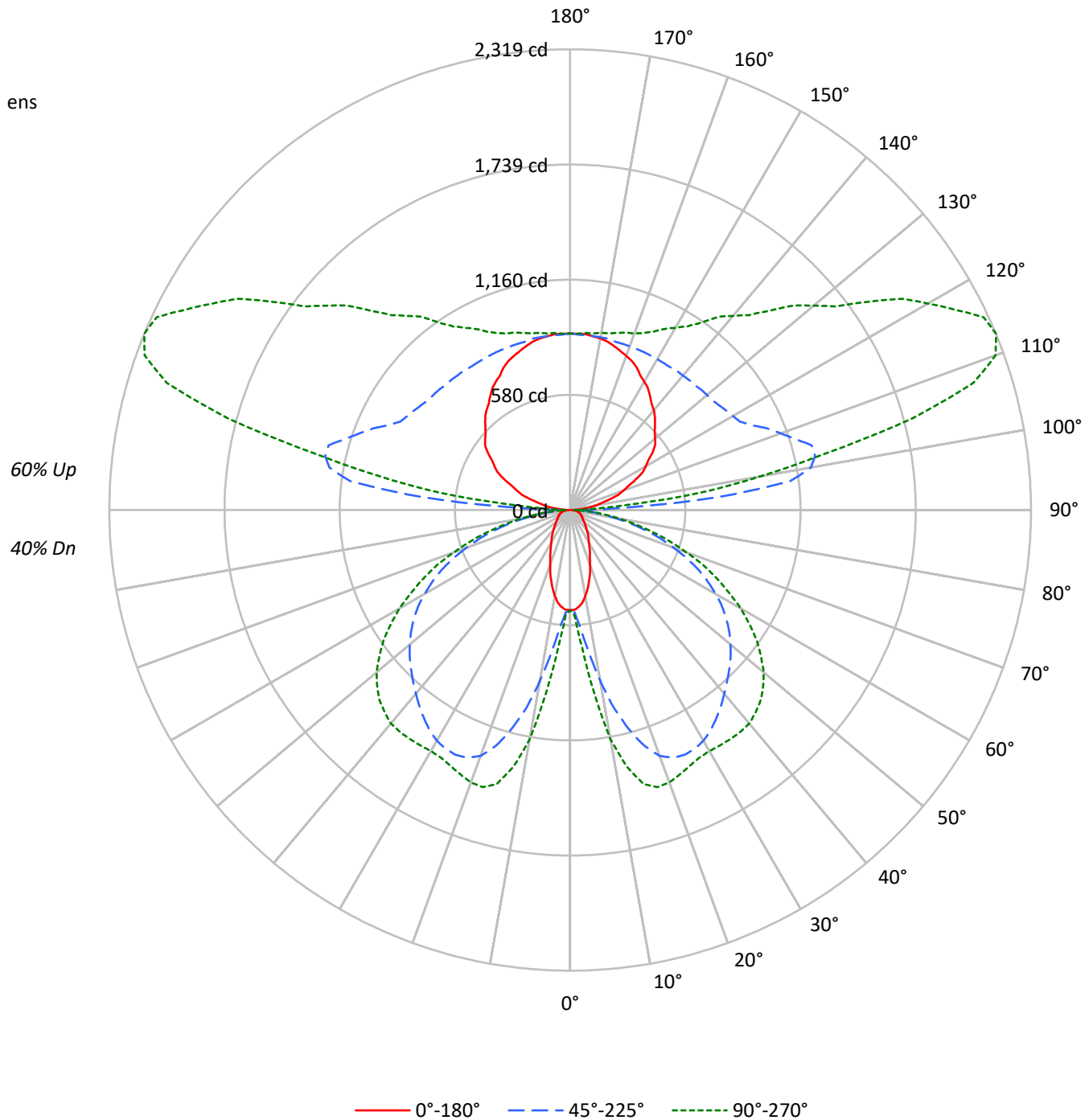
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9654.7 lumens
Efficiency: N/A
Efficacy: 116.0 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): 83.2
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				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4667	4667	4667
5°	4555	5392	6275
10°	4128	7853	10403
15°	3504	10252	12561
20°	2850	11873	12802
25°	2374	12416	12542
30°	1999	12484	12518
35°	1765	12266	12841
40°	1535	11988	13176
45°	1388	11780	13228
50°	1270	11590	13009
55°	1212	11318	12432
60°	1238	10807	11523
65°	1282	10036	10271
70°	1353	8734	8677
75°	1486	7103	6771
80°	1587	4909	4563
85°	1341	2589	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13228 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	0.7
10°-20°	288.4	3.0
20°-30°	504.5	5.2
30°-40°	649.4	6.7
40°-50°	725.4	7.5
50°-60°	694.8	7.2
60°-70°	550.6	5.7
70°-80°	323.8	3.4
80°-90°	93.3	1.0
90°-100°	433.1	4.5
100°-110°	1138.6	11.8
110°-120°	1180.6	12.2
120°-130°	947.0	9.8
130°-140°	743.0	7.7
140°-150°	570.3	5.9
150°-160°	410.7	4.3
160°-170°	251.3	2.6
170°-180°	84.9	0.9
0°-30°	858.0	8.9
0°-40°	1507.4	15.6
0°-60°	2927.6	30.3
0°-90°	3895.3	40.3
90°-120°	2752.2	28.5
90°-150°	5012.5	51.9
90°-180°	5759.0	59.6
0°-180°	9654.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	490	526	592	670	694	45
15°	367	678	1142	1385	1428	102
25°	235	768	1360	1420	1422	108
35°	158	734	1281	1354	1407	99
45°	108	586	1132	1297	1356	84
55°	78	372	961	1116	1147	71
65°	62	197	713	802	814	61
75°	45	121	392	430	432	47
85°	16	37	97	107	108	17
90°	6	17	45	23	23	6
95°	57	224	746	385	262	64
105°	205	311	1259	1911	1783	217
115°	364	442	1008	2011	2296	360
125°	507	568	917	1550	1828	450
135°	604	665	888	1251	1418	467
145°	701	745	877	1067	1151	439
155°	792	814	877	963	991	364
165°	854	866	877	912	923	241
175°	888	888	883	894	894	84
180°	888	888	888	888	888	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	503.0	503.0	506.3	507.9	511.2	512.8	516.0	519.3	529.0	530.6	533.8
5°	490.1	496.6	517.7	525.7	548.4	579.1	592.1	613.1	656.8	669.7	677.8
7.5°	470.7	485.3	537.1	550.0	606.6	687.5	721.5	766.8	836.3	870.2	897.8
10°	440.0	470.7	562.9	593.7	685.8	808.8	871.9	935.0	1040.1	1087.1	1104.8
12.5°	406.0	456.2	590.4	632.5	765.2	944.7	1020.7	1090.3	1210.0	1273.1	1282.8
15°	367.2	435.2	616.3	677.8	849.2	1057.9	1142.0	1227.8	1339.5	1384.7	1396.0
17.5°	333.3	419.0	640.6	705.3	913.9	1159.8	1245.6	1316.8	1407.3	1438.1	1446.1
20°	291.2	393.1	656.8	740.9	981.9	1234.3	1316.8	1371.8	1433.2	1452.6	1455.9
22.5°	260.4	365.6	666.4	753.8	1027.2	1279.5	1349.1	1392.8	1434.9	1441.4	1442.9
25°	234.6	334.9	664.9	768.3	1066.0	1307.0	1360.5	1392.8	1417.1	1420.3	1420.3
27.5°	210.3	300.9	658.4	771.6	1095.1	1313.5	1355.6	1378.3	1389.5	1396.0	1396.0
30°	189.3	268.5	642.2	765.2	1108.1	1307.0	1341.0	1352.4	1363.6	1373.4	1378.3
32.5°	173.1	237.8	618.0	752.2	1109.7	1290.9	1315.2	1321.6	1337.8	1360.5	1368.5
35°	158.5	207.1	590.4	734.4	1100.0	1265.0	1281.1	1287.6	1319.9	1354.0	1365.3
37.5°	144.0	184.4	554.9	703.7	1085.4	1234.3	1245.6	1256.9	1307.0	1347.5	1360.5
40°	129.4	165.0	512.8	669.7	1062.8	1197.0	1206.8	1224.5	1290.9	1337.8	1350.7
42.5°	118.1	148.8	467.5	634.1	1033.6	1155.0	1169.6	1195.5	1271.5	1321.6	1336.2
45°	108.4	132.7	419.0	585.6	996.4	1111.4	1132.4	1167.9	1248.8	1297.4	1310.3
47.5°	98.7	121.3	368.8	535.5	956.0	1067.7	1095.1	1135.6	1218.0	1265.0	1276.4
50°	90.6	110.0	318.6	482.0	912.3	1020.7	1053.1	1095.1	1179.2	1222.9	1237.5
52.5°	84.1	100.3	271.8	428.7	862.2	972.2	1009.4	1053.1	1132.4	1174.4	1184.1
55°	77.6	92.2	231.4	372.1	810.4	920.4	960.9	1002.9	1080.6	1116.1	1122.6
57.5°	74.4	85.8	197.3	318.6	755.4	862.2	907.5	946.3	1019.1	1046.6	1053.1
60°	69.6	80.9	171.5	273.4	695.6	807.2	846.1	884.9	946.3	969.0	973.8
62.5°	64.7	77.6	152.1	229.7	634.1	742.5	781.3	816.9	868.7	884.9	891.3
65°	61.5	74.4	137.5	197.3	571.0	674.6	713.4	744.2	786.2	802.4	805.6
67.5°	58.2	71.2	126.2	169.9	507.9	606.6	635.7	664.9	697.2	713.4	715.0
70°	53.3	68.0	116.4	150.5	443.2	529.0	553.2	583.9	609.8	618.0	622.8
72.5°	50.2	63.1	110.0	135.8	377.0	454.6	477.2	495.0	517.7	525.7	525.7
75°	45.3	56.6	103.5	121.3	309.0	372.1	391.5	409.3	427.0	430.3	425.4
77.5°	40.4	50.2	89.0	101.9	241.0	294.4	310.6	320.3	334.9	338.0	339.7
80°	33.9	43.7	69.6	79.3	174.7	216.7	228.1	236.1	249.1	249.1	252.4
82.5°	25.9	33.9	50.2	56.6	118.1	148.8	158.5	163.4	171.5	171.5	171.5
85°	16.2	21.0	32.3	37.2	71.2	90.6	97.0	98.7	105.2	106.8	106.8
87.5°	8.1	11.3	21.0	22.7	37.2	46.9	46.9	50.2	50.2	48.6	46.9
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.7	22.7
92.5°	23.8	64.3	105.0	115.1	161.8	224.0	255.2	223.6	160.6	113.3	108.8
95°	57.3	131.4	205.6	224.2	398.1	630.0	746.0	665.7	505.1	384.6	370.9
97.5°	98.9	164.4	229.9	246.3	536.2	922.9	1116.2	1065.5	963.9	887.8	861.8
100°	131.2	190.5	249.9	264.7	586.5	1015.6	1230.1	1233.8	1241.3	1246.8	1215.8
102.5°	158.6	214.0	269.4	283.3	609.6	1044.7	1262.3	1326.9	1456.3	1553.3	1526.8
105°	205.2	252.1	298.9	310.7	626.7	1048.0	1258.7	1403.6	1693.6	1911.0	1896.8
107.5°	252.9	296.6	340.3	351.2	629.9	1001.4	1187.2	1389.4	1793.7	2097.1	2100.5
110°	285.0	324.5	364.0	373.9	625.1	960.0	1127.5	1353.6	1805.7	2144.8	2159.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.6	354.3	392.0	401.3	625.3	924.0	1073.3	1304.7	1767.4	2114.4	2137.1
115°	364.3	399.0	433.7	442.4	631.1	882.6	1008.3	1231.1	1676.9	2011.2	2042.9
117.5°	411.5	443.0	474.6	482.4	642.8	856.7	963.6	1164.7	1567.0	1868.7	1903.8
120°	438.8	468.5	498.2	505.6	652.3	847.9	945.7	1129.4	1497.0	1772.7	1806.7
122.5°	465.7	495.6	525.6	533.1	666.0	843.4	932.0	1097.5	1428.5	1676.7	1710.3
125°	506.9	534.1	561.5	568.2	684.5	839.6	917.1	1057.6	1338.8	1549.7	1580.7
127.5°	540.2	567.8	595.3	602.2	702.9	837.4	904.6	1025.3	1266.7	1447.8	1473.9
130°	558.1	587.7	617.4	624.8	716.5	838.7	899.8	1007.2	1222.2	1383.3	1407.4
132.5°	576.6	606.3	635.9	643.4	727.4	839.6	895.6	991.8	1184.2	1328.5	1350.1
135°	604.0	631.1	658.0	664.8	739.4	838.7	888.4	969.0	1130.1	1250.9	1269.6
137.5°	632.0	658.8	685.5	692.2	757.2	844.0	887.3	955.3	1091.6	1193.8	1209.0
140°	655.3	680.0	704.7	710.8	768.2	844.8	883.1	941.9	1059.5	1147.8	1162.0
142.5°	673.2	696.0	718.7	724.5	777.3	847.8	883.1	934.8	1038.1	1115.7	1127.9
145°	700.7	720.5	740.3	745.3	789.3	847.9	877.1	919.4	1003.9	1067.3	1076.6
147.5°	728.0	747.4	766.7	771.6	806.8	853.7	877.1	910.4	976.8	1026.7	1034.4
150°	746.0	763.5	780.9	785.3	815.9	856.7	877.1	905.2	961.4	1003.5	1009.7
152.5°	764.4	777.7	790.9	794.2	821.9	858.7	877.1	901.1	949.1	985.1	989.7
155°	791.9	801.7	811.5	813.9	835.0	863.1	877.1	896.2	934.4	963.0	966.1
157.5°	812.1	821.7	831.1	833.5	848.1	867.5	877.1	891.9	921.6	943.9	946.1
160°	825.8	833.2	840.7	842.5	854.1	869.5	877.1	889.8	915.3	934.3	935.5
162.5°	839.6	845.1	850.6	852.1	860.4	871.6	877.1	887.8	909.3	925.4	926.6
165°	854.5	859.4	864.5	865.8	869.6	874.6	877.1	884.8	900.2	911.6	912.9
167.5°	868.1	870.5	872.9	873.5	876.7	881.0	883.1	888.1	898.2	905.7	906.3
170°	877.1	879.5	881.9	882.5	882.7	883.0	883.1	888.1	898.2	905.7	905.7
172.5°	881.9	882.4	883.0	883.1	883.1	883.1	883.1	887.1	895.0	900.9	900.5
175°	888.4	888.4	888.4	888.4	886.6	884.2	883.1	885.5	890.6	894.4	894.4
177.5°	888.4	888.4	888.4	888.4	887.1	885.3	884.3	886.3	890.2	893.2	892.6
180°	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4	888.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	503.0	503.0
2.5°	537.1	533.8
5°	690.7	694.0
7.5°	930.2	928.6
10°	1156.6	1171.2
12.5°	1321.6	1324.8
15°	1422.0	1428.4
17.5°	1460.8	1462.4
20°	1462.4	1459.1
22.5°	1444.5	1441.4
25°	1423.5	1422.0
27.5°	1404.1	1405.7
30°	1396.0	1400.9
32.5°	1396.0	1404.1
35°	1399.3	1407.3
37.5°	1397.7	1407.3
40°	1391.2	1402.5
42.5°	1373.4	1381.4
45°	1345.9	1355.6
47.5°	1310.3	1316.8
50°	1265.0	1271.5
52.5°	1208.4	1210.0
55°	1140.4	1146.9
57.5°	1067.7	1069.3
60°	986.8	991.7
62.5°	901.0	901.0
65°	810.4	813.7
67.5°	716.6	724.7
70°	621.2	622.8
72.5°	527.3	527.3
75°	430.3	431.9
77.5°	338.0	338.0
80°	250.8	252.4
82.5°	173.1	176.3
85°	108.4	108.4
87.5°	50.2	45.3
90°	22.7	22.7
92.5°	90.7	72.8
95°	316.3	261.8
97.5°	758.0	654.1
100°	1092.1	968.3
102.5°	1420.8	1314.8
105°	1839.8	1782.8
107.5°	2114.3	2128.1
110°	2219.0	2278.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2228.3	2319.4
115°	2169.3	2295.6
117.5°	2043.9	2184.1
120°	1943.0	2079.2
122.5°	1844.7	1979.0
125°	1704.4	1828.2
127.5°	1578.3	1682.7
130°	1503.9	1600.3
132.5°	1436.4	1522.8
135°	1344.0	1418.5
137.5°	1270.0	1330.8
140°	1219.0	1276.0
142.5°	1176.9	1225.9
145°	1113.7	1150.8
147.5°	1065.2	1096.0
150°	1034.7	1059.5
152.5°	1008.6	1027.3
155°	978.6	991.0
157.5°	954.8	963.6
160°	940.6	945.7
162.5°	931.3	936.1
165°	918.0	923.0
167.5°	908.4	910.5
170°	905.7	905.7
172.5°	898.6	896.8
175°	894.4	894.4
177.5°	890.5	888.4
180°	888.4	888.4



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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	5.39	6.20	6.42	7.24	8.64	18.53	19.34	19.56	20.38	21.78
	3H	6.09	6.82	7.13	7.87	9.29	20.35	21.08	21.39	22.13	23.55
	4H	6.39	7.08	7.44	8.13	9.56	20.98	21.67	22.03	22.73	24.15
	6H	6.64	7.27	7.70	8.33	9.77	21.40	22.04	22.46	23.09	24.53
	8H	6.71	7.31	7.77	8.38	9.82	21.51	22.12	22.58	23.19	24.62
	12H	6.72	7.30	7.79	8.36	9.82	21.57	22.15	22.64	23.21	24.67
4H	2H	12.58	13.27	13.63	14.32	15.74	18.80	19.49	19.86	20.54	21.97
	3H	14.14	14.72	15.21	15.80	17.24	20.83	21.40	21.89	22.48	23.92
	4H	14.23	14.76	15.31	15.83	17.30	21.58	22.11	22.65	23.18	24.64
	6H	14.24	14.70	15.32	15.79	17.25	22.10	22.56	23.19	23.65	25.11
	8H	14.22	14.64	15.30	15.73	17.20	22.26	22.68	23.34	23.77	25.24
	12H	14.17	14.56	15.27	15.66	17.13	22.34	22.73	23.44	23.83	25.30
8H	4H	15.66	16.09	16.75	17.18	18.65	21.64	22.06	22.72	23.15	24.62
	6H	15.90	16.26	17.01	17.39	18.85	22.25	22.60	23.36	23.73	25.20
	8H	15.92	16.23	17.03	17.34	18.83	22.46	22.77	23.57	23.88	25.37
	12H	15.89	16.16	17.00	17.27	18.79	22.60	22.87	23.71	23.98	25.50
12H	4H	15.80	16.19	16.90	17.29	18.76	21.59	21.97	22.69	23.07	24.55
	6H	16.16	16.47	17.27	17.58	19.07	22.23	22.54	23.35	23.65	25.14
	8H	16.23	16.50	17.34	17.60	19.13	22.45	22.73	23.57	23.83	25.36