

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: P938184

Luminaire Tested: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938184
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-B2750-1D-UNV-W2A-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

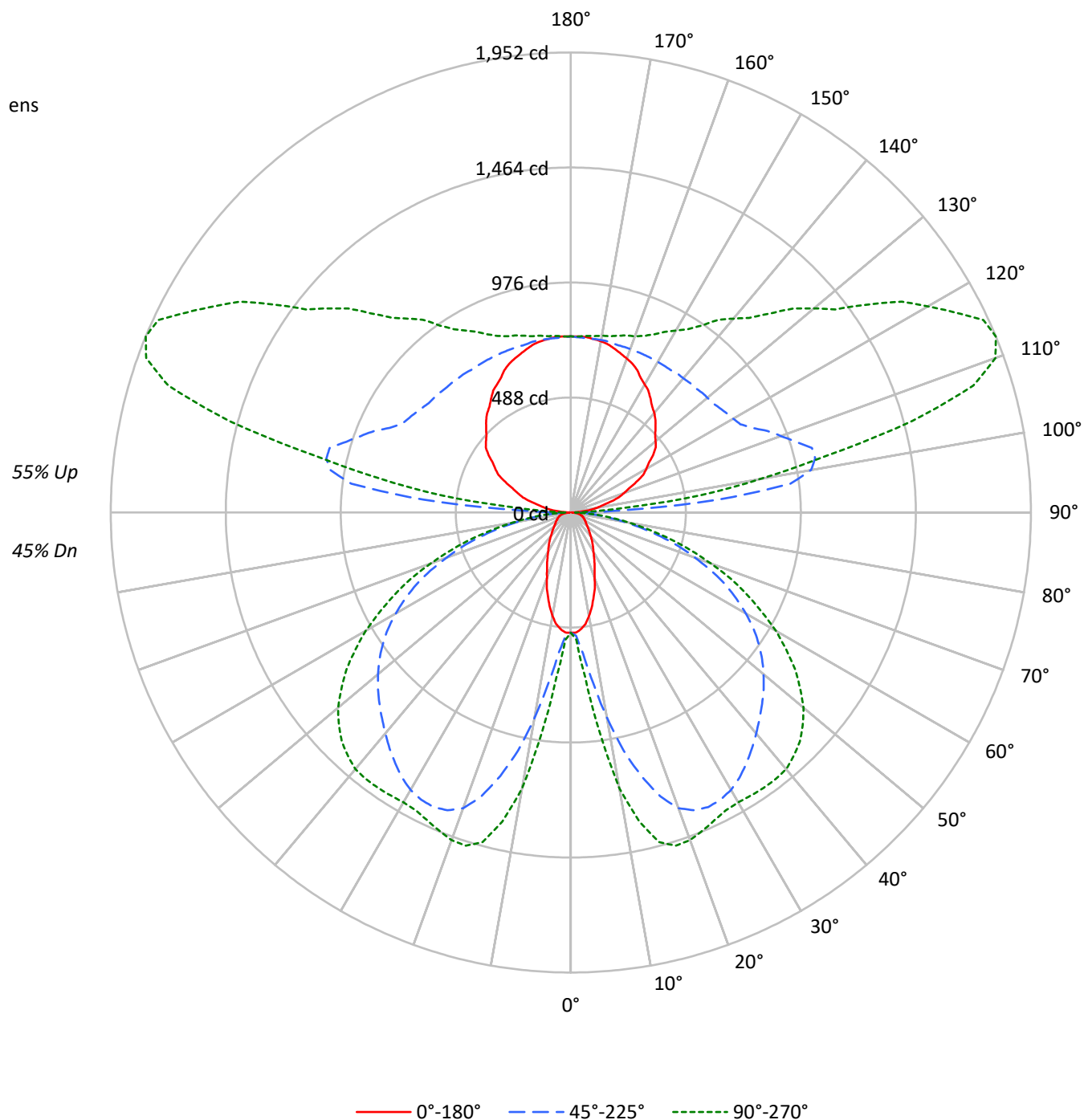
Lumens per Lamp: N/A
Luminaire Lumens: 8793.8 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P938184

CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-4-3500K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4731	4731	4731
5°	4617	5465	6360
10°	4183	7960	10544
15°	3552	10392	12732
20°	2889	12034	12976
25°	2407	12584	12713
30°	2027	12653	12689
35°	1789	12434	13016
40°	1557	12151	13355
45°	1407	11940	13407
50°	1288	11749	13186
55°	1229	11471	12601
60°	1254	10954	11678
65°	1298	10172	10410
70°	1373	8854	8795
75°	1505	7200	6863
80°	1610	4976	4625
85°	1358	2626	2368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13407 cd/sqm

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CATALOG NUMBER: SQ4-FB-125U-125D-B2750-1D-UNV-W2A-W-4-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	0.8
10°-20°	292.3	3.3
20°-30°	511.4	5.8
30°-40°	658.3	7.5
40°-50°	735.3	8.4
50°-60°	704.2	8.0
60°-70°	558.1	6.3
70°-80°	328.2	3.7
80°-90°	94.0	1.1
90°-100°	364.4	4.1
100°-110°	958.0	10.9
110°-120°	993.4	11.3
120°-130°	796.8	9.1
130°-140°	625.2	7.1
140°-150°	479.9	5.5
150°-160°	345.6	3.9
160°-170°	211.4	2.4
170°-180°	71.4	0.8
0°-30°	869.7	9.9
0°-40°	1527.9	17.4
0°-60°	2967.4	33.7
0°-90°	3947.7	44.9
90°-120°	2315.8	26.3
90°-150°	4217.6	48.0
90°-180°	4846.0	55.1
0°-180°	8793.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	497	533	600	679	703	46
15°	372	687	1158	1404	1448	104
25°	238	779	1379	1440	1441	110
35°	161	744	1299	1372	1426	100
45°	110	594	1148	1315	1374	85
55°	79	377	974	1131	1162	72
65°	62	200	723	813	825	62
75°	46	123	397	436	438	48
85°	16	38	98	108	110	17
90°	5	14	38	19	19	5
95°	48	189	628	324	220	53
105°	173	261	1059	1608	1500	183
115°	306	372	848	1692	1932	303
125°	426	478	772	1304	1538	379
135°	508	559	748	1053	1194	393
145°	590	627	738	898	968	369
155°	666	685	738	810	834	306
165°	719	728	738	767	777	203
175°	748	748	743	752	752	71
180°	748	748	748	748	748	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9
2.5°	509.9	509.9	513.2	514.8	518.1	519.8	523.1	526.4	536.1	537.8	541.1
5°	496.8	503.4	524.7	532.9	555.8	587.0	600.1	621.4	665.7	678.8	687.0
7.5°	477.1	491.9	544.4	557.5	614.8	696.8	731.3	777.2	847.7	882.1	910.0
10°	445.9	477.1	570.5	601.7	695.2	819.8	883.7	947.7	1054.3	1101.8	1119.9
12.5°	411.5	462.4	598.5	641.1	775.6	957.6	1034.6	1105.1	1226.5	1290.4	1300.2
15°	372.2	441.1	624.7	687.0	860.8	1072.3	1157.6	1244.5	1357.7	1403.5	1415.0
17.5°	337.8	424.7	649.3	714.9	926.4	1175.6	1262.5	1334.7	1426.5	1457.7	1465.8
20°	295.2	398.5	665.7	751.0	995.3	1251.1	1334.7	1390.4	1452.7	1472.4	1475.7
22.5°	264.0	370.5	675.5	764.1	1041.2	1296.9	1367.5	1411.7	1454.4	1461.0	1462.5
25°	237.8	339.4	673.9	778.8	1080.5	1324.8	1379.0	1411.7	1436.3	1439.6	1439.6
27.5°	213.2	304.9	667.4	782.1	1110.0	1331.4	1374.0	1397.0	1408.4	1415.0	1415.0
30°	191.9	272.2	651.0	775.6	1123.2	1324.8	1359.2	1370.7	1382.2	1392.1	1397.0
32.5°	175.5	241.0	626.4	762.4	1124.8	1308.4	1333.1	1339.5	1356.0	1379.0	1387.1
35°	160.7	209.9	598.5	744.4	1114.9	1282.2	1298.6	1305.1	1337.9	1372.4	1383.8
37.5°	145.9	186.9	562.4	713.3	1100.2	1251.1	1262.5	1274.0	1324.8	1365.8	1379.0
40°	131.2	167.2	519.8	678.8	1077.2	1213.3	1223.2	1241.2	1308.4	1356.0	1369.1
42.5°	119.7	150.9	473.8	642.7	1047.7	1170.7	1185.5	1211.7	1288.8	1339.5	1354.4
45°	109.9	134.5	424.7	593.5	1010.0	1126.5	1147.8	1183.8	1265.8	1315.0	1328.1
47.5°	100.0	123.0	373.8	542.7	969.0	1082.2	1110.0	1151.1	1234.6	1282.2	1293.7
50°	91.9	111.5	323.0	488.6	924.7	1034.6	1067.5	1110.0	1195.3	1239.5	1254.4
52.5°	85.3	101.6	275.5	434.5	873.9	985.4	1023.2	1067.5	1147.8	1190.4	1200.2
55°	78.7	93.4	234.5	377.1	821.4	933.0	973.9	1016.6	1095.3	1131.3	1137.9
57.5°	75.4	86.9	200.0	323.0	765.7	873.9	919.9	959.2	1033.0	1060.9	1067.5
60°	70.5	82.0	173.8	277.1	705.0	818.2	857.6	896.9	959.2	982.2	987.0
62.5°	65.6	78.7	154.2	232.9	642.7	752.6	792.0	828.0	880.5	896.9	903.4
65°	62.3	75.4	139.3	200.0	578.8	683.7	723.1	754.3	796.9	813.3	816.6
67.5°	59.0	72.2	127.9	172.2	514.8	614.8	644.4	673.9	706.7	723.1	724.7
70°	54.1	68.9	118.0	152.5	449.2	536.1	560.8	591.9	618.1	626.4	631.3
72.5°	50.9	64.0	111.5	137.7	382.1	460.8	483.7	501.7	524.7	532.9	532.9
75°	45.9	57.4	104.9	123.0	313.2	377.1	396.8	414.8	432.9	436.1	431.2
77.5°	41.0	50.9	90.2	103.3	244.3	298.5	314.8	324.6	339.4	342.6	344.3
80°	34.4	44.3	70.5	80.3	177.0	219.7	231.2	239.3	252.5	252.5	255.8
82.5°	26.3	34.4	50.9	57.4	119.7	150.9	160.7	165.6	173.8	173.8	173.8
85°	16.4	21.3	32.8	37.7	72.2	91.9	98.4	100.0	106.6	108.2	108.2
87.5°	8.2	11.4	21.3	23.0	37.7	47.6	47.6	50.9	50.9	49.2	47.6
90°	5.0	9.0	13.1	14.1	22.1	32.8	38.1	33.8	25.4	19.1	19.1
92.5°	20.1	54.2	88.3	96.8	136.1	188.6	214.7	188.2	135.2	95.3	91.6
95°	48.2	110.6	173.1	188.7	335.0	530.0	627.6	560.1	425.0	323.6	312.1
97.5°	83.2	138.3	193.4	207.2	451.2	776.5	939.2	896.4	811.1	747.0	725.2
100°	110.4	160.4	210.3	222.8	493.5	854.5	1035.0	1038.1	1044.4	1049.0	1023.0
102.5°	133.4	180.0	226.6	238.3	512.9	879.1	1062.1	1116.6	1225.4	1307.0	1284.7
105°	172.6	212.1	251.6	261.4	527.3	881.9	1059.1	1181.1	1425.0	1608.0	1595.9
107.5°	212.7	249.5	286.3	295.5	530.0	842.6	998.9	1169.1	1509.3	1764.5	1767.4
110°	239.8	273.1	306.2	314.5	526.0	807.9	948.7	1139.0	1519.4	1804.7	1817.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.4	298.1	329.7	337.6	526.1	777.4	903.1	1097.8	1487.1	1779.1	1798.3
115°	306.5	335.8	365.0	372.3	531.0	742.5	848.4	1035.9	1411.0	1692.3	1718.8
117.5°	346.2	372.8	399.3	405.9	540.9	720.8	810.8	979.9	1318.4	1572.3	1601.8
120°	369.3	394.3	419.3	425.5	548.9	713.5	795.7	950.4	1259.6	1491.6	1520.3
122.5°	391.9	417.1	442.3	448.6	560.5	709.6	784.2	923.5	1201.9	1410.8	1439.1
125°	426.5	449.4	472.4	478.1	576.0	706.4	771.6	889.9	1126.5	1303.9	1330.0
127.5°	454.6	477.7	500.9	506.7	591.5	704.6	761.1	862.6	1065.8	1218.1	1240.1
130°	469.6	494.6	519.6	525.8	602.9	705.7	757.1	847.5	1028.3	1164.0	1184.2
132.5°	485.2	510.2	535.2	541.4	612.1	706.4	753.6	834.5	996.4	1117.8	1136.0
135°	508.2	531.0	553.7	559.4	622.1	705.7	747.6	815.4	951.0	1052.6	1068.3
137.5°	531.8	554.3	576.8	582.5	637.1	710.1	746.5	803.8	918.4	1004.4	1017.2
140°	551.4	572.1	592.8	598.1	646.4	710.9	743.0	792.5	891.6	965.8	977.8
142.5°	566.4	585.6	604.8	609.6	654.1	713.4	743.0	786.5	873.5	938.7	948.9
145°	589.5	606.2	623.0	627.1	664.1	713.4	738.0	773.6	844.7	898.1	905.9
147.5°	612.6	628.9	645.2	649.2	678.8	718.2	738.0	766.0	822.0	864.0	870.5
150°	627.6	642.4	657.1	660.8	686.5	720.8	738.0	761.6	808.9	844.4	849.6
152.5°	643.2	654.4	665.5	668.3	691.6	722.5	738.0	758.1	798.6	828.8	832.8
155°	666.3	674.5	682.8	684.8	702.5	726.2	738.0	754.1	786.1	810.3	812.9
157.5°	683.3	691.4	699.3	701.4	713.6	729.9	738.0	750.5	775.5	794.2	796.0
160°	694.9	701.1	707.4	708.9	718.6	731.5	738.0	748.6	770.1	786.1	787.2
162.5°	706.4	711.1	715.8	717.0	723.9	733.3	738.0	747.0	765.1	778.7	779.7
165°	718.9	723.2	727.4	728.5	731.7	735.9	738.0	744.5	757.4	767.1	768.1
167.5°	730.5	732.5	734.5	735.0	737.7	741.3	743.0	747.3	755.7	762.1	762.6
170°	738.0	740.0	742.1	742.5	742.7	742.9	743.0	747.3	755.7	762.1	762.1
172.5°	742.1	742.4	742.9	743.0	743.0	743.0	743.0	746.3	753.0	758.0	757.7
175°	747.6	747.6	747.6	747.6	746.0	744.0	743.0	745.2	749.3	752.5	752.5
177.5°	747.6	747.6	747.6	747.6	746.4	744.8	744.0	745.6	749.0	751.6	751.1
180°	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	509.9	509.9
2.5°	544.4	541.1
5°	700.1	703.4
7.5°	942.8	941.2
10°	1172.3	1187.1
12.5°	1339.5	1342.8
15°	1441.3	1447.8
17.5°	1480.6	1482.3
20°	1482.3	1479.0
22.5°	1464.2	1461.0
25°	1442.8	1441.3
27.5°	1423.2	1424.8
30°	1415.0	1420.0
32.5°	1415.0	1423.2
35°	1418.3	1426.5
37.5°	1416.7	1426.5
40°	1410.1	1421.5
42.5°	1392.1	1400.2
45°	1364.2	1374.0
47.5°	1328.1	1334.7
50°	1282.2	1288.8
52.5°	1224.8	1226.5
55°	1155.9	1162.5
57.5°	1082.2	1083.8
60°	1000.2	1005.1
62.5°	913.3	913.3
65°	821.4	824.7
67.5°	726.4	734.6
70°	629.7	631.3
72.5°	534.5	534.5
75°	436.1	437.8
77.5°	342.6	342.6
80°	254.2	255.8
82.5°	175.5	178.7
85°	109.9	109.9
87.5°	50.9	45.9
90°	19.1	19.1
92.5°	76.4	61.2
95°	266.2	220.3
97.5°	637.8	550.4
100°	918.9	814.7
102.5°	1195.5	1106.3
105°	1548.1	1500.1
107.5°	1779.0	1790.6
110°	1867.1	1917.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1874.9	1951.7
115°	1825.2	1931.6
117.5°	1719.8	1837.7
120°	1634.8	1749.4
122.5°	1552.0	1665.1
125°	1434.0	1538.2
127.5°	1327.9	1415.8
130°	1265.4	1346.6
132.5°	1208.6	1281.3
135°	1130.9	1193.5
137.5°	1068.5	1119.8
140°	1025.7	1073.7
142.5°	990.2	1031.5
145°	937.1	968.3
147.5°	896.2	922.1
150°	870.6	891.6
152.5°	848.6	864.4
155°	823.4	833.8
157.5°	803.4	810.8
160°	791.5	795.7
162.5°	783.7	787.7
165°	772.4	776.7
167.5°	764.3	766.1
170°	762.1	762.1
172.5°	756.1	754.6
175°	752.5	752.5
177.5°	749.3	747.6
180°	747.6	747.6

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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	5.91	6.76	6.90	7.76	9.10	19.05	19.90	20.04	20.90	22.24
	3H	6.61	7.38	7.61	8.39	9.75	20.87	21.63	21.87	22.65	24.01
	4H	6.91	7.63	7.93	8.66	10.02	21.50	22.23	22.52	23.25	24.62
	6H	7.16	7.83	8.19	8.85	10.23	21.92	22.59	22.95	23.61	24.99
	8H	7.23	7.87	8.26	8.91	10.28	22.03	22.67	23.07	23.71	25.09
	12H	7.25	7.85	8.28	8.89	10.29	22.10	22.70	23.13	23.74	25.14
4H	2H	13.10	13.82	14.12	14.84	16.21	19.32	20.04	20.34	21.07	22.43
	3H	14.66	15.27	15.70	16.32	17.70	21.35	21.96	22.38	23.01	24.39
	4H	14.76	15.32	15.80	16.36	17.76	22.11	22.66	23.14	23.70	25.11
	6H	14.77	15.25	15.82	16.31	17.71	22.63	23.11	23.68	24.18	25.57
	8H	14.75	15.19	15.80	16.25	17.67	22.79	23.23	23.84	24.29	25.71
	12H	14.70	15.11	15.77	16.18	17.60	22.87	23.28	23.94	24.35	25.77
8H	4H	16.19	16.64	17.24	17.70	19.11	22.17	22.61	23.22	23.67	25.09
	6H	16.43	16.81	17.51	17.90	19.32	22.78	23.15	23.86	24.25	25.66
	8H	16.45	16.78	17.53	17.86	19.29	22.99	23.32	24.07	24.40	25.83
	12H	16.42	16.71	17.51	17.79	19.26	23.13	23.42	24.21	24.50	25.97
12H	4H	16.33	16.74	17.40	17.81	19.23	22.12	22.52	23.19	23.60	25.02
	6H	16.69	17.02	17.77	18.10	19.53	22.76	23.09	23.85	24.17	25.61
	8H	16.76	17.05	17.84	18.12	19.60	22.99	23.27	24.07	24.35	25.82