

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: P938570

Luminaire Tested: SQ4-FB-150U-125D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938570
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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

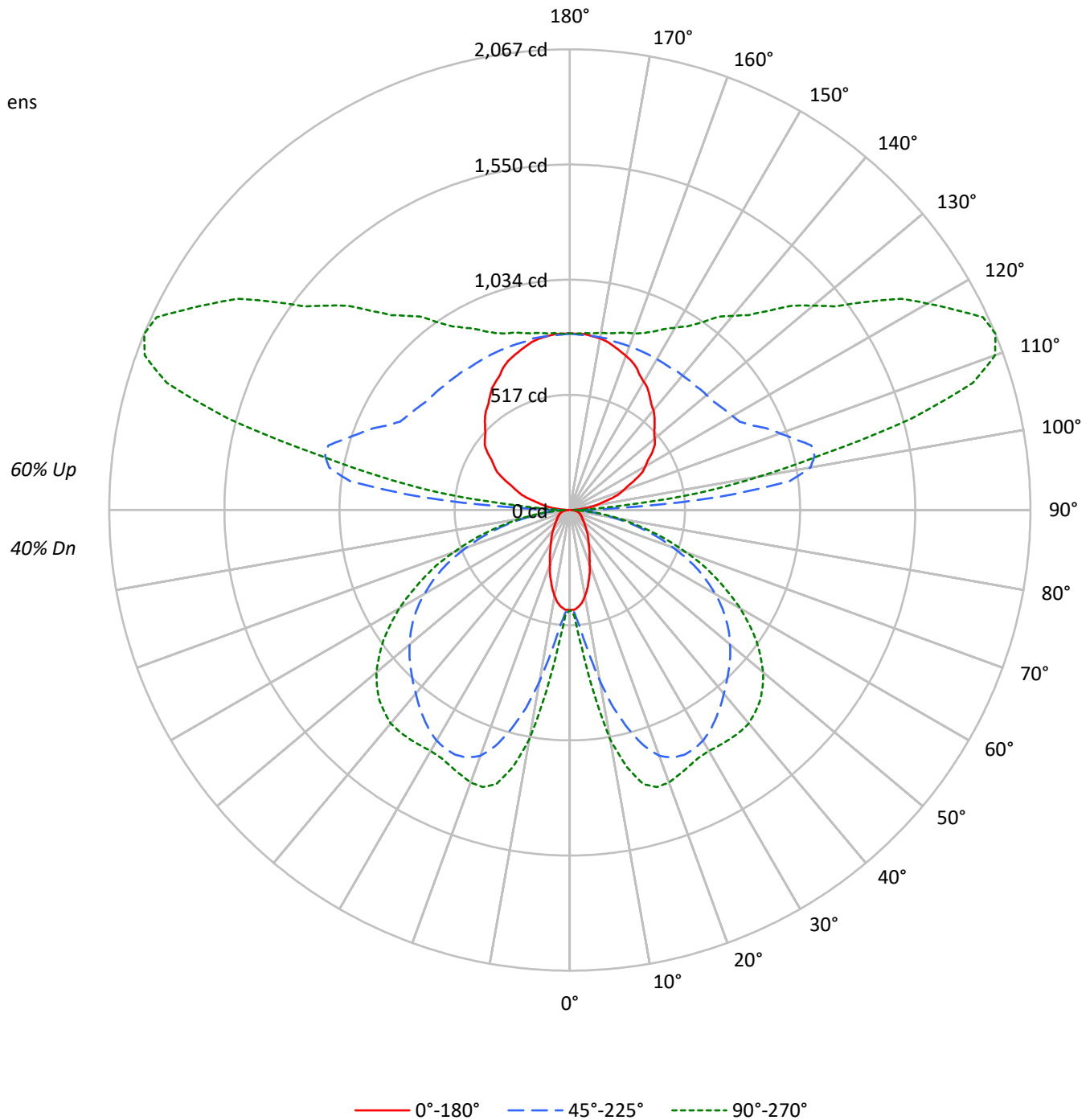
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8604.4 lumens
Efficiency: N/A
Efficacy: 103.4 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 (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	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°	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	0.7
10°-20°	257.0	3.0
20°-30°	449.6	5.2
30°-40°	578.8	6.7
40°-50°	646.5	7.5
50°-60°	619.2	7.2
60°-70°	490.7	5.7
70°-80°	288.5	3.4
80°-90°	83.2	1.0
90°-100°	386.0	4.5
100°-110°	1014.7	11.8
110°-120°	1052.2	12.2
120°-130°	843.9	9.8
130°-140°	662.2	7.7
140°-150°	508.3	5.9
150°-160°	366.0	4.3
160°-170°	224.0	2.6
170°-180°	75.7	0.9
0°-30°	764.7	8.9
0°-40°	1343.4	15.6
0°-60°	2609.1	30.3
0°-90°	3471.5	40.3
90°-120°	2452.8	28.5
90°-150°	4467.2	51.9
90°-180°	5133.0	59.7
0°-180°	8604.4	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°	5	15	40	20	20	5
95°	51	200	665	343	233	57
105°	183	277	1122	1703	1589	194
115°	325	394	899	1792	2046	321
125°	452	506	817	1381	1629	401
135°	538	592	792	1115	1264	416
145°	624	664	782	951	1026	391
155°	706	725	782	858	883	324
165°	762	772	782	812	823	215
175°	792	792	787	797	797	75
180°	792	792	792	792	792	



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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°	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9	20.2	20.2
92.5°	21.2	57.3	93.5	102.6	144.2	199.6	227.4	199.3	143.1	101.0	97.0
95°	51.0	117.2	183.3	199.8	354.8	561.5	664.8	593.2	450.1	342.8	330.6
97.5°	88.2	146.5	204.9	219.5	477.9	822.5	994.8	949.6	859.1	791.3	768.1
100°	116.9	169.8	222.7	235.9	522.7	905.1	1096.3	1099.6	1106.2	1111.2	1083.6
102.5°	141.3	190.8	240.1	252.4	543.3	931.1	1125.0	1182.6	1297.9	1384.3	1360.7
105°	182.8	224.7	266.4	276.9	558.5	934.0	1121.7	1250.9	1509.3	1703.1	1690.5
107.5°	225.4	264.3	303.3	313.0	561.4	892.5	1058.0	1238.2	1598.6	1868.9	1872.0
110°	254.0	289.2	324.4	333.2	557.1	855.6	1004.8	1206.3	1609.3	1911.5	1924.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.2	315.8	349.3	357.7	557.3	823.5	956.5	1162.7	1575.1	1884.4	1904.6
115°	324.7	355.6	386.6	394.3	562.4	786.6	898.6	1097.2	1494.5	1792.4	1820.6
117.5°	366.7	394.8	422.9	429.9	572.9	763.5	858.7	1038.0	1396.5	1665.4	1696.7
120°	391.1	417.6	444.0	450.6	581.3	755.6	842.8	1006.6	1334.1	1579.9	1610.2
122.5°	415.0	441.7	468.4	475.1	593.6	751.6	830.6	978.1	1273.1	1494.3	1524.2
125°	451.7	476.0	500.4	506.4	610.0	748.2	817.3	942.6	1193.1	1381.1	1408.7
127.5°	481.5	506.0	530.5	536.7	626.5	746.3	806.2	913.8	1128.9	1290.3	1313.5
130°	497.4	523.8	550.2	556.9	638.6	747.5	801.9	897.7	1089.2	1232.8	1254.3
132.5°	513.8	540.3	566.8	573.4	648.3	748.2	798.2	883.9	1055.4	1183.9	1203.2
135°	538.3	562.4	586.4	592.5	658.9	747.5	791.8	863.6	1007.1	1114.8	1131.5
137.5°	563.3	587.1	611.0	616.9	674.9	752.1	790.7	851.4	972.8	1063.9	1077.4
140°	584.0	606.0	628.0	633.5	684.7	752.9	787.0	839.4	944.3	1022.9	1035.6
142.5°	600.0	620.3	640.5	645.6	692.8	755.6	787.0	833.1	925.2	994.3	1005.2
145°	624.4	642.2	659.8	664.2	703.4	755.6	781.7	819.4	894.7	951.2	959.4
147.5°	648.8	666.1	683.3	687.6	719.0	760.8	781.7	811.4	870.6	915.0	921.9
150°	664.8	680.4	695.9	699.8	727.1	763.5	781.7	806.8	856.8	894.3	899.9
152.5°	681.3	693.1	704.9	707.8	732.5	765.3	781.7	803.1	845.9	877.9	882.1
155°	705.7	714.5	723.2	725.4	744.1	769.2	781.7	798.8	832.7	858.2	861.0
157.5°	723.8	732.3	740.7	742.9	755.8	773.1	781.7	794.9	821.3	841.2	843.1
160°	736.0	742.6	749.2	750.9	761.2	774.9	781.7	793.0	815.7	832.7	833.8
162.5°	748.2	753.2	758.1	759.4	766.8	776.8	781.7	791.3	810.4	824.7	825.8
165°	761.5	765.9	770.5	771.6	775.0	779.5	781.7	788.5	802.2	812.5	813.6
167.5°	773.7	775.8	778.0	778.5	781.3	785.1	787.0	791.5	800.5	807.2	807.7
170°	781.7	783.8	786.0	786.5	786.7	786.9	787.0	791.5	800.5	807.2	807.2
172.5°	786.0	786.4	786.9	787.0	787.0	787.0	787.0	790.6	797.6	802.9	802.5
175°	791.8	791.8	791.8	791.8	790.1	788.0	787.0	789.2	793.7	797.1	797.1
177.5°	791.8	791.8	791.8	791.8	790.6	789.0	788.1	789.9	793.4	796.0	795.5
180°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8



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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°	20.2	20.2
92.5°	80.9	64.8
95°	281.9	233.3
97.5°	675.6	582.9
100°	973.3	863.0
102.5°	1266.2	1171.8
105°	1639.7	1588.9
107.5°	1884.3	1896.6
110°	1977.6	2030.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1985.9	2067.1
115°	1933.3	2045.9
117.5°	1821.6	1946.5
120°	1731.6	1853.0
122.5°	1644.0	1763.7
125°	1518.9	1629.3
127.5°	1406.6	1499.6
130°	1340.3	1426.2
132.5°	1280.1	1357.2
135°	1197.8	1264.2
137.5°	1131.8	1186.1
140°	1086.4	1137.2
142.5°	1048.9	1092.5
145°	992.6	1025.6
147.5°	949.3	976.7
150°	922.1	944.3
152.5°	898.9	915.6
155°	872.1	883.2
157.5°	850.9	858.7
160°	838.3	842.8
162.5°	830.0	834.3
165°	818.1	822.6
167.5°	809.6	811.4
170°	807.2	807.2
172.5°	800.9	799.3
175°	797.1	797.1
177.5°	793.6	791.8
180°	791.8	791.8



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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	4.99	5.80	6.02	6.84	8.24	18.13	18.94	19.16	19.98	21.38
	3H	5.70	6.42	6.73	7.47	8.89	19.95	20.68	20.99	21.73	23.15
	4H	5.99	6.68	7.04	7.73	9.16	20.58	21.27	21.63	22.33	23.75
	6H	6.24	6.88	7.30	7.93	9.37	21.00	21.64	22.06	22.69	24.13
	8H	6.31	6.91	7.37	7.98	9.42	21.11	21.72	22.18	22.79	24.22
	12H	6.32	6.90	7.39	7.96	9.42	21.17	21.75	22.24	22.81	24.27
4H	2H	12.18	12.87	13.23	13.92	15.34	18.40	19.09	19.46	20.14	21.57
	3H	13.74	14.32	14.81	15.40	16.84	20.43	21.00	21.49	22.08	23.52
	4H	13.83	14.36	14.91	15.43	16.90	21.18	21.71	22.25	22.78	24.24
	6H	13.84	14.30	14.92	15.39	16.85	21.70	22.16	22.79	23.25	24.71
	8H	13.82	14.24	14.90	15.33	16.80	21.86	22.28	22.94	23.37	24.84
	12H	13.77	14.16	14.87	15.26	16.73	21.94	22.33	23.04	23.43	24.90
8H	4H	15.26	15.69	16.35	16.78	18.25	21.24	21.66	22.32	22.75	24.22
	6H	15.50	15.86	16.61	16.99	18.45	21.85	22.20	22.96	23.33	24.80
	8H	15.52	15.83	16.63	16.94	18.43	22.06	22.37	23.17	23.48	24.97
	12H	15.49	15.76	16.60	16.87	18.39	22.20	22.47	23.31	23.58	25.10
12H	4H	15.40	15.79	16.50	16.89	18.36	21.19	21.57	22.29	22.67	24.15
	6H	15.76	16.07	16.87	17.18	18.67	21.83	22.14	22.95	23.25	24.74
	8H	15.83	16.10	16.94	17.20	18.73	22.05	22.33	23.17	23.43	24.96