

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: P937223

Luminaire Tested: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937223
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

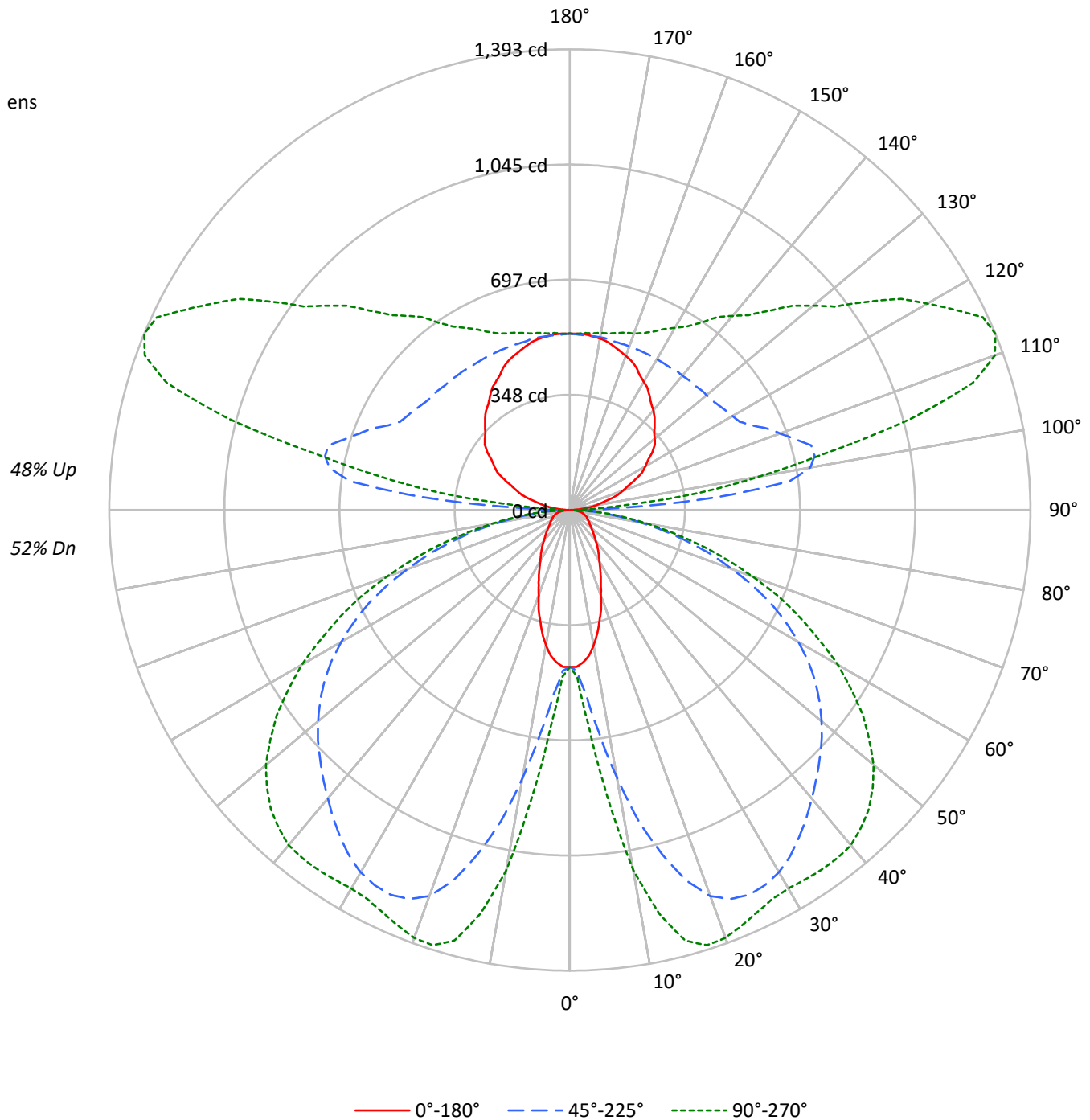
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7131.7 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 76.8
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: P937223
CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P937223

CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	47	47	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	39	39	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	32	32	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	27	27	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	20	20	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	18	18	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	16	16	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	14	14	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2867	3392	3946
10°	2599	4944	6542
15°	2209	6458	7899
20°	1797	7482	8051
25°	1499	7827	7887
30°	1264	7874	7872
35°	1116	7742	8076
40°	972	7570	8286
45°	880	7443	8318
50°	807	7329	8181
55°	771	7161	7818
60°	789	6844	7246
65°	820	6363	6458
70°	872	5545	5457
75°	961	4517	4258
80°	1042	3128	2870
85°	906	1658	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8318 cd/sqm



TEST NUMBER: P937223

CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	0.9
10°-20°	272.1	3.8
20°-30°	475.9	6.7
30°-40°	612.6	8.6
40°-50°	684.3	9.6
50°-60°	655.4	9.2
60°-70°	519.4	7.3
70°-80°	305.4	4.3
80°-90°	86.9	1.2
90°-100°	260.0	3.6
100°-110°	683.7	9.6
110°-120°	708.9	9.9
120°-130°	568.6	8.0
130°-140°	446.2	6.3
140°-150°	342.4	4.8
150°-160°	246.6	3.5
160°-170°	150.9	2.1
170°-180°	51.0	0.7
0°-30°	809.4	11.3
0°-40°	1422.0	19.9
0°-60°	2761.7	38.7
0°-90°	3673.4	51.5
90°-120°	1652.6	23.2
90°-150°	3009.8	42.2
90°-180°	3458.0	48.5
0°-180°	7131.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	462	496	558	632	655	43
15°	346	639	1077	1306	1347	96
25°	221	725	1283	1340	1341	102
35°	150	693	1209	1277	1328	93
45°	102	552	1068	1224	1279	79
55°	73	351	906	1053	1082	67
65°	58	186	673	757	768	57
75°	43	114	369	406	407	45
85°	15	35	92	101	102	16
90°	4	10	27	14	14	4
95°	34	135	448	231	157	38
105°	123	187	756	1148	1070	131
115°	219	266	606	1208	1378	216
125°	304	341	551	930	1098	270
135°	363	399	534	751	852	281
145°	421	448	527	641	691	264
155°	476	489	527	578	595	218
165°	513	520	527	548	554	145
175°	534	534	530	537	537	51
180°	534	534	534	534	534	



TEST NUMBER: P937223

CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6
2.5°	474.6	474.6	477.6	479.2	482.2	483.7	486.8	489.9	499.0	500.5	503.6
5°	462.4	468.5	488.3	496.0	517.3	546.3	558.5	578.3	619.5	631.8	639.4
7.5°	444.1	457.8	506.7	518.8	572.3	648.6	680.6	723.3	788.9	821.0	846.9
10°	415.0	444.1	531.1	560.0	647.0	763.0	822.5	882.0	981.2	1025.5	1042.3
12.5°	383.0	430.4	557.0	596.7	721.8	891.2	962.9	1028.5	1141.4	1201.0	1210.1
15°	346.4	410.5	581.4	639.4	801.1	998.0	1077.4	1158.2	1263.5	1306.2	1316.9
17.5°	314.4	395.2	604.3	665.4	862.2	1094.2	1175.0	1242.2	1327.6	1356.6	1364.2
20°	274.7	370.8	619.5	698.9	926.3	1164.3	1242.2	1294.1	1352.0	1370.4	1373.4
22.5°	245.7	344.9	628.7	711.1	969.0	1207.1	1272.7	1313.9	1353.6	1359.7	1361.2
25°	221.3	315.9	627.2	724.9	1005.6	1233.0	1283.4	1313.9	1336.8	1339.8	1339.8
27.5°	198.4	283.8	621.1	727.9	1033.1	1239.1	1278.7	1300.1	1310.8	1316.9	1316.9
30°	178.6	253.3	605.8	721.8	1045.3	1233.0	1265.0	1275.7	1286.4	1295.5	1300.1
32.5°	163.3	224.3	582.9	709.6	1046.8	1217.8	1240.6	1246.7	1262.0	1283.4	1291.0
35°	149.5	195.3	557.0	692.8	1037.7	1193.3	1208.6	1214.7	1245.2	1277.3	1287.9
37.5°	135.8	173.9	523.4	663.8	1023.9	1164.3	1175.0	1185.7	1233.0	1271.1	1283.4
40°	122.0	155.6	483.7	631.8	1002.5	1129.2	1138.4	1155.2	1217.8	1262.0	1274.2
42.5°	111.4	140.4	441.0	598.2	975.1	1089.6	1103.3	1127.7	1199.4	1246.7	1260.5
45°	102.3	125.1	395.2	552.4	940.0	1048.4	1068.2	1101.8	1178.0	1223.8	1236.1
47.5°	93.1	114.4	348.0	505.1	901.8	1007.2	1033.1	1071.2	1149.1	1193.3	1204.0
50°	85.5	103.8	300.6	454.8	860.6	962.9	993.5	1033.1	1112.4	1153.6	1167.4
52.5°	79.4	94.6	256.3	404.4	813.4	917.1	952.2	993.5	1068.2	1107.9	1117.0
55°	73.2	87.0	218.2	351.0	764.5	868.3	906.4	946.1	1019.3	1052.9	1059.1
57.5°	70.2	80.9	186.2	300.6	712.6	813.4	856.1	892.7	961.3	987.3	993.5
60°	65.6	76.3	161.8	257.9	656.2	761.5	798.1	834.7	892.7	914.1	918.6
62.5°	61.1	73.2	143.5	216.7	598.2	700.4	737.0	770.6	819.4	834.7	840.8
65°	58.0	70.2	129.7	186.2	538.7	636.3	673.0	701.9	741.7	756.9	759.9
67.5°	54.9	67.1	119.0	160.2	479.2	572.3	599.7	627.2	657.7	673.0	674.5
70°	50.4	64.1	109.9	141.9	418.1	499.0	521.9	550.9	575.3	582.9	587.5
72.5°	47.3	59.5	103.8	128.2	355.6	428.8	450.1	466.9	488.3	496.0	496.0
75°	42.7	53.4	97.6	114.4	291.4	351.0	369.3	386.1	402.9	405.9	401.3
77.5°	38.1	47.3	83.9	96.2	227.4	277.7	293.0	302.1	315.9	318.9	320.5
80°	32.0	41.2	65.6	74.8	164.8	204.5	215.1	222.8	235.0	235.0	238.1
82.5°	24.4	32.0	47.3	53.4	111.4	140.4	149.5	154.2	161.8	161.8	161.8
85°	15.2	19.9	30.5	35.1	67.1	85.5	91.6	93.1	99.2	100.7	100.7
87.5°	7.6	10.7	19.9	21.3	35.1	44.3	44.3	47.3	47.3	45.8	44.3
90°	3.5	6.4	9.3	10.0	15.7	23.3	27.2	24.2	18.2	13.6	13.6
92.5°	14.3	38.7	63.0	69.1	97.1	134.5	153.2	134.3	96.4	68.0	65.3
95°	34.3	78.9	123.4	134.6	239.0	378.3	447.9	399.7	303.2	230.9	222.8
97.5°	59.4	98.7	138.0	147.8	322.0	554.2	670.3	639.8	578.9	533.1	517.5
100°	78.8	114.4	150.1	159.0	352.2	609.8	738.7	740.9	745.4	748.7	730.1
102.5°	95.2	128.5	161.8	170.1	366.1	627.3	758.0	796.8	874.5	932.7	916.8
105°	123.2	151.4	179.6	186.6	376.3	629.3	755.8	842.8	1016.9	1147.5	1139.0
107.5°	151.8	178.1	204.4	210.9	378.2	601.3	712.9	834.3	1077.2	1259.3	1261.3
110°	171.2	194.9	218.5	224.5	375.3	576.5	677.1	812.8	1084.3	1287.9	1296.8



TEST NUMBER: P937223

CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	190.1	212.7	235.3	240.9	375.5	554.8	644.5	783.4	1061.2	1269.6	1283.3
115°	218.8	239.6	260.4	265.7	378.9	529.9	605.5	739.3	1006.9	1207.7	1226.6
117.5°	247.0	266.0	284.9	289.7	386.0	514.4	578.6	699.4	940.9	1122.1	1143.1
120°	263.5	281.4	299.1	303.6	391.7	509.1	567.9	678.2	898.9	1064.4	1084.9
122.5°	279.7	297.6	315.6	320.1	399.9	506.4	559.6	659.0	857.7	1006.8	1026.9
125°	304.3	320.7	337.1	341.2	411.0	504.1	550.7	635.1	804.0	930.5	949.1
127.5°	324.4	341.0	357.4	361.6	422.1	502.8	543.2	615.6	760.6	869.3	885.0
130°	335.1	353.0	370.8	375.2	430.3	503.7	540.3	604.8	733.9	830.7	845.2
132.5°	346.2	364.1	381.8	386.3	436.8	504.1	537.8	595.5	711.1	797.7	810.7
135°	362.7	378.9	395.2	399.2	444.0	503.7	533.5	581.8	678.6	751.1	762.3
137.5°	379.5	395.5	411.6	415.6	454.7	506.7	532.8	573.6	655.4	716.8	726.0
140°	393.5	408.3	423.1	426.8	461.3	507.3	530.2	565.6	636.3	689.2	697.8
142.5°	404.2	418.0	431.7	435.0	466.8	509.0	530.2	561.3	623.3	669.9	677.3
145°	420.7	432.7	444.5	447.5	473.9	509.1	526.7	552.1	602.8	640.9	646.4
147.5°	437.1	448.8	460.4	463.3	484.4	512.6	526.7	546.6	586.6	616.5	621.2
150°	447.9	458.4	468.9	471.5	490.0	514.4	526.7	543.5	577.3	602.6	606.4
152.5°	459.0	467.0	474.9	476.9	493.5	515.6	526.7	541.1	569.9	591.5	594.4
155°	475.5	481.3	487.3	488.7	501.3	518.2	526.7	538.2	561.1	578.3	580.1
157.5°	487.6	493.4	499.1	500.6	509.3	520.9	526.7	535.6	553.4	566.8	568.1
160°	495.9	500.3	504.8	505.9	512.8	522.1	526.7	534.3	549.5	561.0	561.8
162.5°	504.1	507.5	510.8	511.7	516.7	523.4	526.7	533.1	546.0	555.7	556.4
165°	513.1	516.1	519.1	519.9	522.1	525.1	526.7	531.3	540.5	547.5	548.2
167.5°	521.3	522.8	524.1	524.5	526.4	529.0	530.2	533.2	539.3	543.9	544.2
170°	526.7	528.1	529.5	529.9	530.0	530.1	530.2	533.2	539.3	543.9	543.9
172.5°	529.5	529.8	530.1	530.2	530.2	530.2	530.2	532.6	537.4	541.0	540.7
175°	533.5	533.5	533.5	533.5	532.4	530.9	530.2	531.8	534.8	537.1	537.1
177.5°	533.5	533.5	533.5	533.5	532.6	531.5	531.0	532.2	534.6	536.4	536.1
180°	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5



TEST NUMBER: P937223

CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	474.6	474.6
2.5°	506.7	503.6
5°	651.6	654.7
7.5°	877.4	876.0
10°	1091.1	1104.8
12.5°	1246.7	1249.8
15°	1341.3	1347.4
17.5°	1378.0	1379.5
20°	1379.5	1376.5
22.5°	1362.7	1359.7
25°	1342.9	1341.3
27.5°	1324.6	1326.1
30°	1316.9	1321.5
32.5°	1316.9	1324.6
35°	1320.0	1327.6
37.5°	1318.5	1327.6
40°	1312.3	1323.0
42.5°	1295.5	1303.2
45°	1269.7	1278.7
47.5°	1236.1	1242.2
50°	1193.3	1199.4
52.5°	1139.9	1141.4
55°	1075.8	1081.9
57.5°	1007.2	1008.7
60°	930.9	935.4
62.5°	850.0	850.0
65°	764.5	767.5
67.5°	676.0	683.6
70°	586.0	587.5
72.5°	497.5	497.5
75°	405.9	407.4
77.5°	318.9	318.9
80°	236.5	238.1
82.5°	163.3	166.3
85°	102.3	102.3
87.5°	47.3	42.7
90°	13.6	13.6
92.5°	54.4	43.7
95°	190.0	157.2
97.5°	455.1	392.8
100°	655.7	581.4
102.5°	853.2	789.5
105°	1104.7	1070.5
107.5°	1269.6	1277.8
110°	1332.4	1368.1



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CATALOG NUMBER: SQ4-FB-075U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1338.0	1392.8
115°	1302.5	1378.5
117.5°	1227.3	1311.5
120°	1166.7	1248.5
122.5°	1107.6	1188.3
125°	1023.5	1097.8
127.5°	947.7	1010.4
130°	903.1	961.0
132.5°	862.6	914.5
135°	807.0	851.8
137.5°	762.5	799.2
140°	732.0	766.2
142.5°	706.7	736.1
145°	668.7	691.0
147.5°	639.6	658.0
150°	621.3	636.3
152.5°	605.6	616.9
155°	587.6	595.1
157.5°	573.3	578.6
160°	564.8	567.9
162.5°	559.3	562.1
165°	551.2	554.2
167.5°	545.5	546.7
170°	543.9	543.9
172.5°	539.6	538.5
175°	537.1	537.1
177.5°	534.8	533.5
180°	533.5	533.5



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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	4.88	5.80	5.82	6.75	8.00	18.05	18.96	18.98	19.92	21.16
	3H	5.59	6.41	6.54	7.38	8.65	19.88	20.71	20.83	21.67	22.94
	4H	5.89	6.67	6.85	7.64	8.92	20.53	21.31	21.49	22.28	23.56
	6H	6.14	6.86	7.12	7.84	9.13	20.96	21.68	21.93	22.65	23.94
	8H	6.21	6.90	7.19	7.89	9.18	21.08	21.76	22.06	22.76	24.05
	12H	6.23	6.88	7.22	7.87	9.19	21.14	21.80	22.13	22.79	24.10
4H	2H	12.09	12.87	13.06	13.85	15.12	18.33	19.11	19.29	20.08	21.36
	3H	13.67	14.32	14.64	15.32	16.61	20.37	21.02	21.35	22.03	23.32
	4H	13.76	14.36	14.75	15.36	16.67	21.14	21.74	22.12	22.73	24.05
	6H	13.78	14.29	14.78	15.31	16.63	21.68	22.19	22.67	23.21	24.52
	8H	13.76	14.24	14.76	15.25	16.58	21.84	22.32	22.84	23.33	24.66
	12H	13.72	14.15	14.74	15.18	16.51	21.93	22.37	22.95	23.39	24.73
8H	4H	15.21	15.69	16.21	16.70	18.03	21.20	21.69	22.20	22.70	24.03
	6H	15.45	15.85	16.48	16.91	18.23	21.83	22.23	22.86	23.28	24.61
	8H	15.47	15.83	16.51	16.87	18.21	22.05	22.40	23.08	23.44	24.79
	12H	15.44	15.76	16.48	16.79	18.18	22.19	22.50	23.23	23.54	24.93
12H	4H	15.35	15.79	16.37	16.82	18.15	21.16	21.59	22.18	22.62	23.96
	6H	15.71	16.07	16.75	17.11	18.45	21.81	22.17	22.85	23.21	24.55
	8H	15.78	16.10	16.82	17.13	18.52	22.04	22.36	23.08	23.39	24.78