

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: P937190

Luminaire Tested: SQ4-FB-075U-075D-B2750-1D-UNV-W2A-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937190
REPORT IS A COMBINATION OF REPORTS P933510 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-B2750-1D-UNV-W2A-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

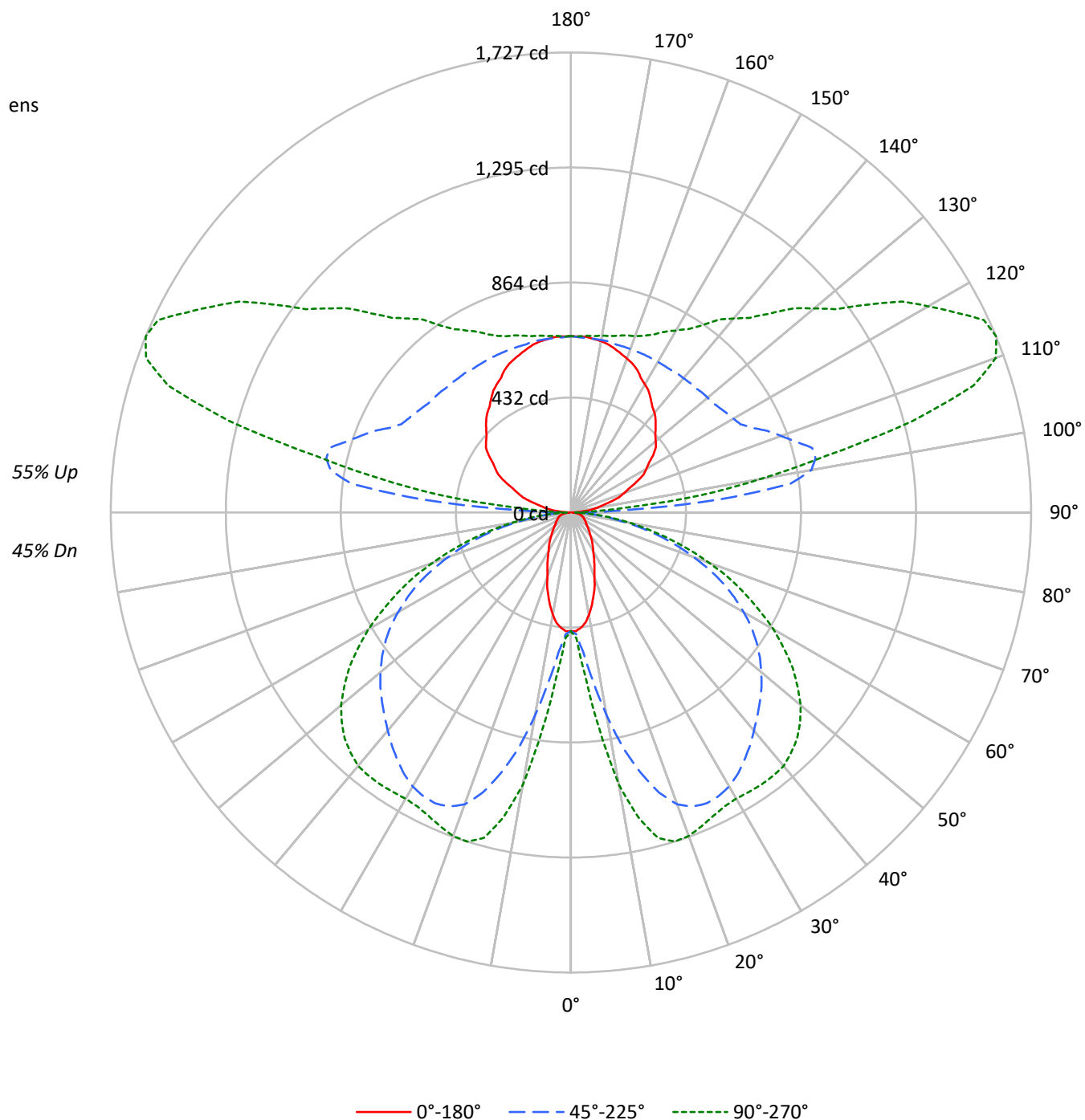
Lumens per Lamp: N/A
Luminaire Lumens: 7738.3 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 63.6
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: P937190

CATALOG NUMBER: SQ4-FB-075U-075D-B2750-1D-UNV-W2A-W-6-4000K

Luminous Intensity Polar Plot



TEST NUMBER: P937190

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2691	3185	3704
10°	2440	4641	6141
15°	2073	6062	7416
20°	1687	7024	7558
25°	1407	7348	7405
30°	1186	7392	7390
35°	1048	7268	7582
40°	913	7105	7780
45°	826	6987	7810
50°	757	6880	7680
55°	725	6723	7339
60°	741	6425	6802
65°	769	5973	6063
70°	818	5205	5122
75°	902	4241	3998
80°	980	2938	2694
85°	853	1557	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	0.7
10°-20°	255.4	3.3
20°-30°	446.8	5.8
30°-40°	575.1	7.4
40°-50°	642.4	8.3
50°-60°	615.2	8.0
60°-70°	487.6	6.3
70°-80°	286.7	3.7
80°-90°	82.2	1.1
90°-100°	322.5	4.2
100°-110°	847.9	11.0
110°-120°	879.2	11.4
120°-130°	705.2	9.1
130°-140°	553.4	7.2
140°-150°	424.7	5.5
150°-160°	305.9	4.0
160°-170°	187.1	2.4
170°-180°	63.2	0.8
0°-30°	759.8	9.8
0°-40°	1335.0	17.3
0°-60°	2592.6	33.5
0°-90°	3449.1	44.6
90°-120°	2049.7	26.5
90°-150°	3733.0	48.2
90°-180°	4289.0	55.4
0°-180°	7738.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	434	466	524	593	614	40
15°	325	600	1011	1226	1265	90
25°	208	680	1205	1258	1259	96
35°	140	650	1135	1199	1246	88
45°	96	519	1003	1149	1200	74
55°	69	330	851	988	1016	63
65°	54	175	632	710	720	54
75°	40	107	347	381	382	42
85°	14	33	86	94	96	15
90°	4	12	34	17	17	5
95°	43	167	556	286	195	47
105°	153	231	937	1423	1328	162
115°	271	330	751	1498	1710	268
125°	377	423	683	1154	1362	335
135°	450	495	662	932	1056	348
145°	522	555	653	795	857	327
155°	590	606	653	717	738	271
165°	636	645	653	679	687	180
175°	662	662	658	666	666	63
180°	662	662	662	662	662	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5
2.5°	445.5	445.5	448.4	449.8	452.7	454.1	457.0	459.8	468.4	469.9	472.7
5°	434.0	439.8	458.4	465.6	485.6	512.8	524.3	542.9	581.6	593.1	600.2
7.5°	416.9	429.8	475.6	487.0	537.2	608.8	638.9	679.0	740.6	770.7	795.0
10°	389.6	416.9	498.5	525.7	607.4	716.2	772.1	828.0	921.1	962.6	978.4
12.5°	359.6	404.0	522.9	560.1	677.6	836.6	903.9	965.5	1071.5	1127.5	1136.1
15°	325.2	385.3	545.8	600.2	752.1	936.9	1011.3	1087.4	1186.2	1226.3	1236.3
17.5°	295.1	371.0	567.3	624.6	809.4	1027.1	1103.1	1166.2	1246.4	1273.6	1280.8
20°	257.8	348.1	581.6	656.1	869.5	1093.1	1166.2	1214.9	1269.3	1286.5	1289.3
22.5°	230.6	323.7	590.2	667.5	909.6	1133.2	1194.8	1233.5	1270.7	1276.5	1277.9
25°	207.7	296.5	588.8	680.4	944.0	1157.6	1204.8	1233.5	1255.0	1257.8	1257.8
27.5°	186.2	266.4	583.0	683.3	969.8	1163.3	1200.5	1220.6	1230.6	1236.3	1236.3
30°	167.6	237.8	568.7	677.6	981.3	1157.6	1187.6	1197.7	1207.7	1216.3	1220.6
32.5°	153.3	210.6	547.2	666.1	982.7	1143.2	1164.7	1170.4	1184.8	1204.8	1212.0
35°	140.4	183.4	522.9	650.4	974.1	1120.3	1134.6	1140.4	1169.0	1199.1	1209.1
37.5°	127.5	163.3	491.3	623.1	961.2	1093.1	1103.1	1113.1	1157.6	1193.4	1204.8
40°	114.6	146.1	454.1	593.1	941.2	1060.0	1068.6	1084.4	1143.2	1184.8	1196.2
42.5°	104.6	131.8	414.0	561.5	915.4	1022.8	1035.7	1058.6	1126.0	1170.4	1183.3
45°	96.0	117.5	371.0	518.6	882.4	984.1	1002.8	1034.3	1106.0	1149.0	1160.4
47.5°	87.4	107.4	326.6	474.2	846.6	945.4	969.8	1005.6	1078.7	1120.3	1130.3
50°	80.2	97.4	282.2	426.9	807.9	903.9	932.6	969.8	1044.3	1083.0	1096.0
52.5°	74.5	88.8	240.7	379.6	763.5	860.9	893.9	932.6	1002.8	1040.0	1048.6
55°	68.8	81.7	204.8	329.5	717.7	815.1	850.9	888.2	956.9	988.4	994.2
57.5°	65.9	75.9	174.8	282.2	669.0	763.5	803.6	838.0	902.5	926.8	932.6
60°	61.6	71.6	151.8	242.1	616.0	714.8	749.2	783.6	838.0	858.1	862.4
62.5°	57.3	68.8	134.7	203.4	561.5	657.5	691.9	723.4	769.3	783.6	789.3
65°	54.4	65.9	121.8	174.8	505.7	597.4	631.7	658.9	696.2	710.5	713.4
67.5°	51.6	63.0	111.7	150.4	449.8	537.2	563.0	588.8	617.4	631.7	633.2
70°	47.3	60.2	103.1	133.2	392.5	468.4	489.9	517.1	540.1	547.2	551.5
72.5°	44.4	55.9	97.4	120.3	333.8	402.5	422.6	438.3	458.4	465.6	465.6
75°	40.1	50.1	91.7	107.4	273.6	329.5	346.7	362.4	378.2	381.0	376.7
77.5°	35.8	44.4	78.8	90.2	213.4	260.7	275.0	283.6	296.5	299.4	300.8
80°	30.1	38.7	61.6	70.2	154.7	192.0	202.0	209.1	220.6	220.6	223.5
82.5°	22.9	30.1	44.4	50.1	104.6	131.8	140.4	144.7	151.8	151.8	151.8
85°	14.3	18.6	28.6	32.9	63.0	80.2	86.0	87.4	93.1	94.5	94.5
87.5°	7.2	10.0	18.6	20.1	32.9	41.5	41.5	44.4	44.4	43.0	41.5
90°	4.4	7.9	11.6	12.4	19.5	28.9	33.7	30.0	22.5	16.9	16.9
92.5°	17.8	47.9	78.1	85.7	120.4	166.8	190.0	166.6	119.6	84.3	81.0
95°	42.6	97.9	153.1	166.9	296.4	469.2	555.5	495.7	376.1	286.4	276.3
97.5°	73.7	122.4	171.1	183.4	399.4	687.3	831.3	793.5	718.0	661.2	641.9
100°	97.7	141.9	186.1	197.2	436.8	756.4	916.1	918.9	924.4	928.5	905.5
102.5°	118.1	159.4	200.6	211.0	454.0	778.0	940.1	988.2	1084.6	1156.8	1137.0
105°	152.8	187.8	222.7	231.4	466.7	780.5	937.4	1045.3	1261.3	1423.2	1412.6
107.5°	188.3	220.9	253.5	261.6	469.1	745.8	884.1	1034.7	1335.9	1561.8	1564.4
110°	212.3	241.7	271.0	278.4	465.5	715.0	839.7	1008.1	1344.8	1597.3	1608.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	235.8	263.8	291.8	298.8	465.7	688.1	799.3	971.6	1316.2	1574.6	1591.6
115°	271.3	297.2	323.0	329.5	470.0	657.2	750.9	916.9	1248.9	1497.8	1521.3
117.5°	306.4	329.9	353.3	359.3	478.7	637.9	717.6	867.4	1167.0	1391.7	1417.8
120°	326.8	349.0	371.0	376.6	485.8	631.4	704.3	841.2	1114.9	1320.2	1345.6
122.5°	346.9	369.1	391.5	397.0	496.0	628.1	694.1	817.3	1063.8	1248.7	1273.7
125°	377.4	397.8	418.1	423.2	509.8	625.2	683.0	787.7	997.1	1154.1	1177.1
127.5°	402.3	422.9	443.3	448.5	523.5	623.6	673.7	763.5	943.3	1078.2	1097.7
130°	415.6	437.8	459.8	465.4	533.7	624.7	670.1	750.2	910.2	1030.3	1048.2
132.5°	429.4	451.5	473.6	479.1	541.8	625.2	667.0	738.6	881.9	989.4	1005.4
135°	449.8	470.0	490.1	495.2	550.7	624.7	661.6	721.6	841.6	931.6	945.4
137.5°	470.7	490.6	510.5	515.5	563.9	628.5	660.8	711.5	812.9	889.0	900.4
140°	488.0	506.3	524.8	529.4	572.1	629.2	657.6	701.4	789.1	854.8	865.4
142.5°	501.4	518.4	535.4	539.6	578.9	631.4	657.6	696.1	773.1	830.8	840.0
145°	521.8	536.6	551.3	555.0	587.8	631.4	653.2	684.7	747.7	794.8	801.7
147.5°	542.2	556.6	571.0	574.6	600.8	635.7	653.2	678.0	727.5	764.7	770.4
150°	555.5	568.5	581.6	584.8	607.7	638.0	653.2	674.1	716.0	747.4	752.1
152.5°	569.3	579.2	589.0	591.5	612.1	639.5	653.2	671.1	706.8	733.6	737.2
155°	589.7	597.0	604.3	606.1	621.8	642.7	653.2	667.4	695.9	717.2	719.5
157.5°	604.8	612.0	619.0	620.8	631.6	646.1	653.2	664.3	686.4	703.0	704.6
160°	615.0	620.6	626.1	627.4	636.0	647.5	653.2	662.7	681.6	695.8	696.8
162.5°	625.2	629.4	633.5	634.6	640.8	649.1	653.2	661.2	677.2	689.2	690.1
165°	636.3	640.1	643.9	644.8	647.6	651.3	653.2	658.9	670.4	679.0	680.0
167.5°	646.5	648.3	650.1	650.5	652.9	656.1	657.6	661.3	668.9	674.5	674.9
170°	653.2	655.0	656.8	657.2	657.3	657.5	657.6	661.3	668.9	674.5	674.5
172.5°	656.8	657.1	657.5	657.6	657.6	657.6	657.6	660.6	666.5	671.0	670.6
175°	661.6	661.6	661.6	661.6	660.3	658.5	657.6	659.5	663.2	666.1	666.1
177.5°	661.6	661.6	661.6	661.6	660.6	659.2	658.6	660.1	663.1	665.3	664.9
180°	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	445.5	445.5
2.5°	475.6	472.7
5°	611.7	614.5
7.5°	823.7	822.3
10°	1024.2	1037.1
12.5°	1170.4	1173.3
15°	1259.3	1265.0
17.5°	1293.6	1295.1
20°	1295.1	1292.2
22.5°	1279.3	1276.5
25°	1260.7	1259.3
27.5°	1243.5	1244.9
30°	1236.3	1240.6
32.5°	1236.3	1243.5
35°	1239.2	1246.4
37.5°	1237.8	1246.4
40°	1232.0	1242.1
42.5°	1216.3	1223.5
45°	1191.9	1200.5
47.5°	1160.4	1166.2
50°	1120.3	1126.0
52.5°	1070.1	1071.5
55°	1009.9	1015.6
57.5°	945.4	946.9
60°	873.8	878.1
62.5°	797.9	797.9
65°	717.7	720.5
67.5°	634.6	641.8
70°	550.1	551.5
72.5°	467.0	467.0
75°	381.0	382.5
77.5°	299.4	299.4
80°	222.0	223.5
82.5°	153.3	156.1
85°	96.0	96.0
87.5°	44.4	40.1
90°	16.9	16.9
92.5°	67.5	54.1
95°	235.6	194.9
97.5°	564.5	487.1
100°	813.3	721.1
102.5°	1058.1	979.2
105°	1370.1	1327.7
107.5°	1574.6	1584.8
110°	1652.5	1696.7



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CATALOG NUMBER: SQ4-FB-075U-075D-B2750-1D-UNV-W2A-W-6-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1659.5	1727.4
115°	1615.5	1709.6
117.5°	1522.2	1626.6
120°	1447.0	1548.4
122.5°	1373.8	1473.9
125°	1269.4	1361.5
127.5°	1175.4	1253.2
130°	1120.0	1191.8
132.5°	1069.8	1134.2
135°	1000.9	1056.4
137.5°	945.7	991.2
140°	907.9	950.3
142.5°	876.5	913.0
145°	829.4	857.0
147.5°	793.2	816.1
150°	770.6	789.1
152.5°	751.1	765.1
155°	728.8	738.0
157.5°	711.1	717.6
160°	700.5	704.3
162.5°	693.6	697.2
165°	683.7	687.4
167.5°	676.5	678.0
170°	674.5	674.5
172.5°	669.3	667.8
175°	666.1	666.1
177.5°	663.2	661.6
180°	661.6	661.6

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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	4.01	4.85	5.00	5.87	7.21	17.17	18.02	18.17	19.03	20.37
	3H	4.71	5.47	5.72	6.49	7.86	19.00	19.77	20.01	20.79	22.15
	4H	5.01	5.73	6.03	6.75	8.13	19.65	20.37	20.66	21.39	22.76
	6H	5.26	5.92	6.29	6.95	8.34	20.07	20.74	21.10	21.76	23.15
	8H	5.33	5.96	6.36	7.01	8.39	20.19	20.82	21.22	21.87	23.25
	12H	5.34	5.95	6.38	6.99	8.39	20.25	20.86	21.29	21.90	23.30
4H	2H	11.21	11.93	12.24	12.96	14.33	17.44	18.17	18.47	19.19	20.56
	3H	12.78	13.38	13.81	14.43	15.82	19.48	20.09	20.52	21.14	22.53
	4H	12.87	13.43	13.91	14.47	15.88	20.25	20.80	21.29	21.84	23.25
	6H	12.88	13.36	13.93	14.43	15.83	20.78	21.26	21.83	22.33	23.73
	8H	12.86	13.31	13.91	14.37	15.78	20.94	21.39	21.99	22.45	23.86
	12H	12.81	13.22	13.89	14.29	15.72	21.03	21.43	22.10	22.51	23.93
8H	4H	14.31	14.76	15.36	15.82	17.24	20.31	20.75	21.36	21.81	23.23
	6H	14.55	14.92	15.63	16.03	17.44	20.93	21.30	22.01	22.40	23.82
	8H	14.57	14.90	15.66	15.98	17.42	21.15	21.47	22.23	22.56	23.99
	12H	14.54	14.83	15.63	15.91	17.38	21.29	21.57	22.38	22.65	24.13
12H	4H	14.45	14.86	15.52	15.93	17.36	20.26	20.66	21.33	21.74	23.16
	6H	14.81	15.14	15.89	16.22	17.66	20.91	21.24	22.00	22.32	23.76
	8H	14.88	15.17	15.97	16.25	17.72	21.14	21.43	22.23	22.51	23.98