

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: P937440

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937440
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

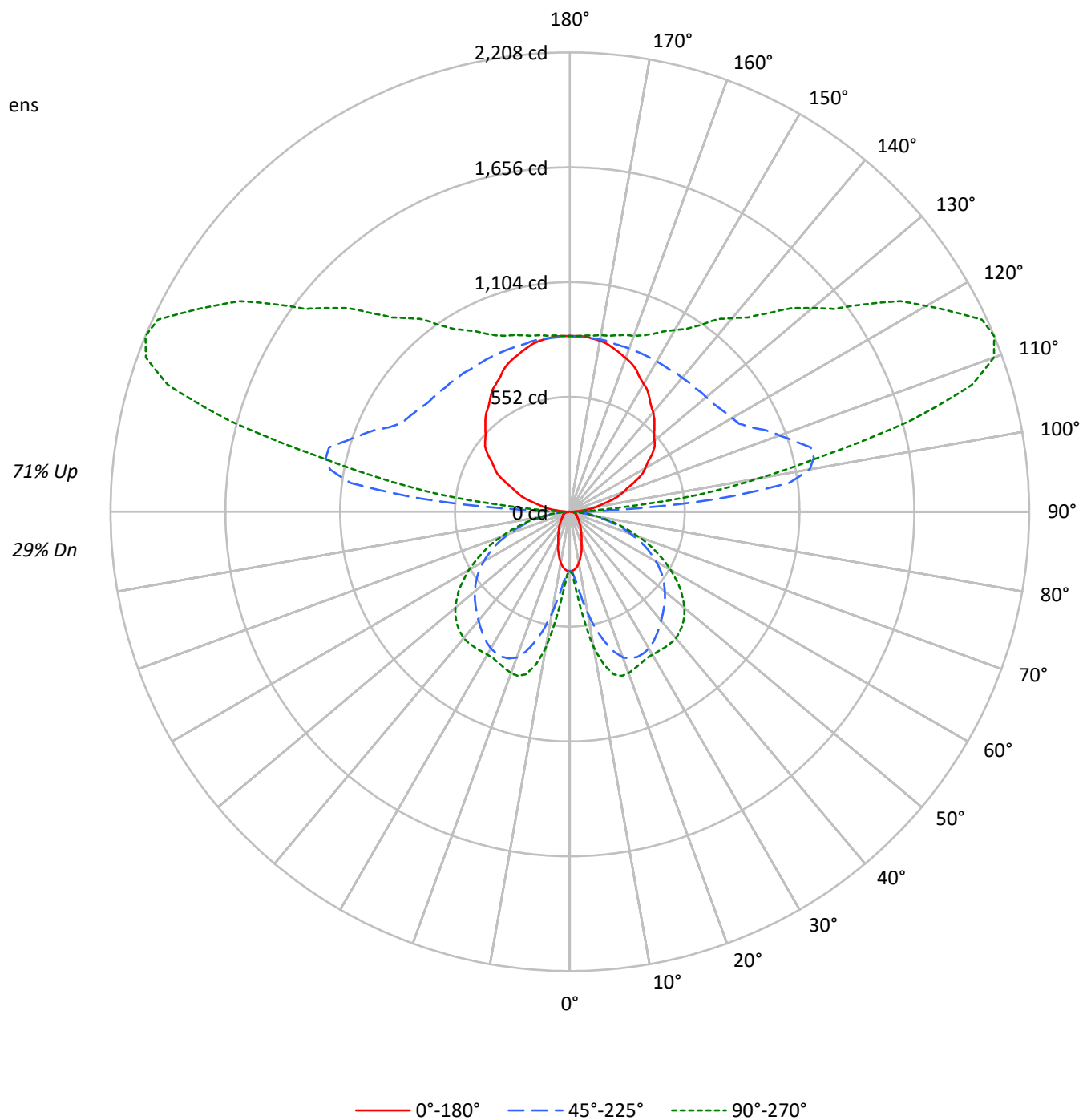
Lumens per Lamp: N/A
Luminaire Lumens: 7686.4 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
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

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CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-4000K

Luminous Intensity Polar Plot



TEST NUMBER: P937440

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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	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	30	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	25	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	21	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	18	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	15	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	13	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	11	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	10	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	9	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1760	1760	1760
5°	1719	2034	2366
10°	1559	2964	3922
15°	1324	3871	4736
20°	1078	4486	4827
25°	899	4693	4729
30°	758	4721	4720
35°	670	4641	4842
40°	583	4539	4969
45°	527	4463	4988
50°	483	4394	4906
55°	462	4294	4689
60°	474	4104	4345
65°	490	3815	3873
70°	522	3325	3272
75°	578	2708	2553
80°	625	1876	1720
85°	549	994	881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4988 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	0.5
10°-20°	163.1	2.1
20°-30°	285.4	3.7
30°-40°	367.3	4.8
40°-50°	410.3	5.3
50°-60°	393.0	5.1
60°-70°	311.4	4.1
70°-80°	183.1	2.4
80°-90°	54.1	0.7
90°-100°	412.2	5.4
100°-110°	1083.7	14.1
110°-120°	1123.7	14.6
120°-130°	901.3	11.7
130°-140°	707.2	9.2
140°-150°	542.8	7.1
150°-160°	390.9	5.1
160°-170°	239.2	3.1
170°-180°	80.8	1.1
0°-30°	485.3	6.3
0°-40°	852.6	11.1
0°-60°	1655.9	21.5
0°-90°	2204.6	28.7
90°-120°	2619.6	34.1
90°-150°	4771.0	62.1
90°-180°	5482.0	71.3
0°-180°	7686.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	284	284	284	284	284	
5°	277	297	335	379	392	26
15°	208	383	646	783	808	58
25°	133	435	770	803	804	61
35°	90	415	725	766	796	56
45°	61	331	640	734	767	47
55°	44	210	544	631	649	40
65°	35	112	404	454	460	34
75°	26	69	221	243	244	27
85°	9	21	55	60	61	10
90°	6	16	43	22	22	5
95°	54	213	710	366	249	61
105°	195	296	1198	1819	1697	207
115°	347	421	960	1914	2185	343
125°	482	541	873	1475	1740	428
135°	575	633	846	1191	1350	445
145°	667	709	835	1016	1095	418
155°	754	775	835	917	943	346
165°	813	824	835	868	878	230
175°	846	846	840	851	851	80
180°	846	846	846	846	846	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5	284.5
2.5°	284.5	284.5	286.4	287.3	289.2	290.1	291.9	293.7	299.2	300.1	301.9
5°	277.3	280.9	292.8	297.4	310.2	327.6	334.8	346.8	371.5	378.8	383.4
7.5°	266.3	274.5	303.7	311.1	343.1	388.9	408.1	433.7	473.0	492.3	507.9
10°	248.9	266.3	318.4	335.8	388.0	457.5	493.2	528.9	588.4	614.8	624.9
12.5°	229.7	258.1	333.9	357.8	432.8	534.3	577.3	616.7	684.4	720.1	725.5
15°	207.7	246.1	348.6	383.4	480.4	598.4	645.9	694.5	757.6	783.2	789.7
17.5°	188.5	237.0	362.3	399.0	516.9	656.0	704.5	744.8	796.0	813.4	817.9
20°	164.7	222.3	371.5	419.1	555.4	698.1	744.8	775.9	810.7	821.7	823.5
22.5°	147.3	206.8	377.0	426.3	581.0	723.7	763.1	787.7	811.6	815.2	816.1
25°	132.7	189.4	376.0	434.6	603.0	739.3	769.5	787.7	801.5	803.3	803.3
27.5°	119.0	170.2	372.4	436.4	619.5	743.0	766.7	779.6	785.9	789.7	789.7
30°	107.1	151.9	363.2	432.8	626.7	739.3	758.5	764.9	771.3	776.8	779.6
32.5°	97.9	134.5	349.5	425.4	627.6	730.2	743.9	747.5	756.6	769.5	774.1
35°	89.7	117.2	333.9	415.4	622.2	715.5	724.6	728.3	746.6	765.8	772.2
37.5°	81.4	104.3	313.8	398.1	613.9	698.1	704.5	711.0	739.3	762.2	769.5
40°	73.2	93.3	290.1	378.8	601.2	677.0	682.6	692.6	730.2	756.6	764.0
42.5°	66.8	84.1	264.4	358.7	584.6	653.3	661.5	676.1	719.2	747.5	755.7
45°	61.3	75.0	237.0	331.2	563.6	628.6	640.5	660.6	706.3	733.8	741.1
47.5°	55.9	68.6	208.6	302.8	540.8	603.9	619.5	642.3	689.0	715.5	721.9
50°	51.2	62.2	180.3	272.6	516.0	577.3	595.6	619.5	667.0	691.7	700.0
52.5°	47.6	56.8	153.7	242.5	487.7	549.9	571.0	595.6	640.5	664.3	669.8
55°	43.9	52.1	130.8	210.4	458.4	520.6	543.5	567.2	611.2	631.3	635.0
57.5°	42.1	48.5	111.6	180.3	427.3	487.7	513.3	535.2	576.4	592.0	595.6
60°	39.4	45.8	97.0	154.6	393.4	456.5	478.6	500.5	535.2	548.1	550.8
62.5°	36.6	43.9	86.1	129.9	358.7	420.0	441.9	462.1	491.3	500.5	504.1
65°	34.7	42.1	77.8	111.6	323.0	381.5	403.5	420.9	444.6	453.8	455.6
67.5°	32.9	40.3	71.4	96.1	287.3	343.1	359.6	376.0	394.3	403.5	404.4
70°	30.2	38.4	65.9	85.1	250.7	299.2	312.9	330.3	344.9	349.5	352.3
72.5°	28.4	35.7	62.2	76.9	213.2	257.1	269.9	280.0	292.8	297.4	297.4
75°	25.7	32.0	58.6	68.6	174.7	210.4	221.4	231.5	241.5	243.4	240.6
77.5°	22.8	28.4	50.3	57.7	136.4	166.6	175.7	181.2	189.4	191.2	192.1
80°	19.2	24.7	39.4	44.8	98.8	122.6	129.0	133.6	140.9	140.9	142.7
82.5°	14.6	19.2	28.4	32.0	66.8	84.1	89.7	92.4	97.0	97.0	97.0
85°	9.2	11.9	18.3	21.0	40.3	51.2	54.9	55.9	59.5	60.4	60.4
87.5°	4.5	6.4	11.9	12.8	21.0	26.6	26.6	28.4	28.4	27.5	26.6
90°	5.6	10.2	14.7	15.9	25.0	37.1	43.1	38.3	28.7	21.6	21.6
92.5°	22.7	61.3	99.9	109.5	154.0	213.2	242.9	212.9	152.8	107.8	103.5
95°	54.5	125.1	195.8	213.4	379.0	599.6	710.0	633.6	480.7	366.0	353.0
97.5°	94.2	156.5	218.9	234.4	510.4	878.4	1062.5	1014.2	917.6	845.1	820.3
100°	124.9	181.4	237.9	252.0	558.2	966.6	1170.8	1174.3	1181.4	1186.7	1157.2
102.5°	151.0	203.8	256.4	269.6	580.3	994.4	1201.4	1263.0	1386.1	1478.4	1453.2
105°	195.2	239.9	284.5	295.7	596.5	997.6	1198.1	1336.1	1612.0	1818.9	1805.4
107.5°	240.6	282.3	323.9	334.3	599.5	953.1	1130.0	1322.4	1707.3	1996.0	1999.3
110°	271.3	308.8	346.5	355.8	595.0	913.8	1073.2	1288.3	1718.7	2041.4	2055.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	301.4	337.2	373.0	382.0	595.2	879.4	1021.5	1241.7	1682.2	2012.5	2034.1
115°	346.8	379.8	412.8	421.1	600.6	840.0	959.7	1171.8	1596.1	1914.3	1944.4
117.5°	391.6	421.6	451.6	459.1	611.7	815.3	917.1	1108.6	1491.4	1778.6	1812.0
120°	417.7	446.0	474.2	481.3	620.9	807.0	900.1	1075.0	1424.9	1687.3	1719.7
122.5°	443.3	471.7	500.3	507.4	633.9	802.7	887.1	1044.6	1359.6	1595.9	1627.9
125°	482.4	508.4	534.4	540.9	651.6	799.1	872.9	1006.7	1274.3	1475.1	1504.5
127.5°	514.2	540.4	566.7	573.3	669.1	797.0	861.0	975.9	1205.6	1378.0	1402.8
130°	531.2	559.5	587.7	594.8	682.0	798.3	856.4	958.7	1163.2	1316.7	1339.6
132.5°	548.8	577.1	605.3	612.4	692.4	799.1	852.4	944.0	1127.1	1264.5	1285.0
135°	574.9	600.6	626.4	632.8	703.8	798.3	845.6	922.3	1075.6	1190.7	1208.5
137.5°	601.5	627.0	652.6	658.9	720.8	803.3	844.5	909.4	1039.0	1136.2	1150.7
140°	623.7	647.2	670.7	676.5	731.2	804.0	840.5	896.5	1008.5	1092.5	1106.0
142.5°	640.7	662.5	684.1	689.6	739.9	806.9	840.5	889.7	988.0	1061.8	1073.5
145°	666.9	685.8	704.7	709.4	751.3	807.0	834.9	875.1	955.6	1015.9	1024.7
147.5°	693.0	711.3	729.7	734.3	767.8	812.5	834.9	866.5	929.8	977.3	984.6
150°	710.0	726.6	743.3	747.4	776.6	815.4	834.9	861.6	915.0	955.1	961.0
152.5°	727.6	740.3	752.8	756.0	782.3	817.3	834.9	857.7	903.4	937.6	942.0
155°	753.7	763.0	772.3	774.6	794.7	821.5	834.9	853.1	889.4	916.6	919.6
157.5°	773.0	782.1	791.1	793.4	807.2	825.7	834.9	849.0	877.3	898.4	900.5
160°	786.0	793.1	800.2	801.9	812.9	827.6	834.9	847.0	871.2	889.4	890.5
162.5°	799.1	804.4	809.7	811.0	818.9	829.6	834.9	845.1	865.5	880.8	881.9
165°	813.3	818.0	822.9	824.0	827.7	832.5	834.9	842.1	856.8	867.8	869.0
167.5°	826.3	828.6	830.9	831.4	834.4	838.5	840.5	845.3	854.9	862.1	862.6
170°	834.9	837.1	839.4	840.0	840.1	840.4	840.5	845.3	854.9	862.1	862.1
172.5°	839.4	839.9	840.4	840.5	840.5	840.5	840.5	844.3	851.9	857.5	857.1
175°	845.6	845.6	845.6	845.6	843.9	841.6	840.5	842.9	847.7	851.3	851.3
177.5°	845.6	845.6	845.6	845.6	844.3	842.6	841.7	843.6	847.3	850.1	849.6
180°	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	284.5	284.5
2.5°	303.7	301.9
5°	390.7	392.5
7.5°	526.1	525.2
10°	654.2	662.4
12.5°	747.5	749.4
15°	804.3	807.9
17.5°	826.2	827.1
20°	827.1	825.3
22.5°	817.0	815.2
25°	805.2	804.3
27.5°	794.2	795.1
30°	789.7	792.4
32.5°	789.7	794.2
35°	791.5	796.0
37.5°	790.6	796.0
40°	786.8	793.3
42.5°	776.8	781.4
45°	761.3	766.7
47.5°	741.1	744.8
50°	715.5	719.2
52.5°	683.5	684.4
55°	645.0	648.8
57.5°	603.9	604.8
60°	558.2	560.9
62.5°	509.7	509.7
65°	458.4	460.2
67.5°	405.3	409.9
70°	351.4	352.3
72.5°	298.3	298.3
75°	243.4	244.3
77.5°	191.2	191.2
80°	141.8	142.7
82.5°	97.9	99.7
85°	61.3	61.3
87.5°	28.4	25.7
90°	21.6	21.6
92.5°	86.3	69.2
95°	301.1	249.1
97.5°	721.4	622.6
100°	1039.4	921.6
102.5°	1352.3	1251.4
105°	1751.1	1696.9
107.5°	2012.5	2025.6
110°	2112.1	2168.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2120.9	2207.7
115°	2064.7	2185.0
117.5°	1945.4	2078.9
120°	1849.4	1979.0
122.5°	1755.8	1883.7
125°	1622.2	1740.0
127.5°	1502.3	1601.6
130°	1431.5	1523.3
132.5°	1367.3	1449.5
135°	1279.3	1350.2
137.5°	1208.7	1266.8
140°	1160.3	1214.5
142.5°	1120.2	1166.9
145°	1060.1	1095.4
147.5°	1013.9	1043.2
150°	984.8	1008.5
152.5°	959.9	977.9
155°	931.4	943.2
157.5°	908.8	917.1
160°	895.4	900.1
162.5°	886.4	891.0
165°	873.8	878.5
167.5°	864.6	866.6
170°	862.1	862.1
172.5°	855.3	853.6
175°	851.3	851.3
177.5°	847.6	845.6
180°	845.6	845.6

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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	0.59	1.31	1.71	2.42	3.96	13.76	14.47	14.87	15.59	17.13
	3H	1.29	1.93	2.41	3.05	4.61	15.58	16.22	16.70	17.34	18.90
	4H	1.58	2.19	2.71	3.31	4.88	16.21	16.83	17.35	17.95	19.51
	6H	1.82	2.38	2.96	3.51	5.09	16.63	17.20	17.78	18.32	19.90
	8H	1.88	2.42	3.03	3.56	5.13	16.75	17.28	17.89	18.42	19.99
	12H	1.90	2.40	3.05	3.54	5.13	16.81	17.32	17.96	18.45	20.04
4H	2H	7.78	8.39	8.92	9.51	11.08	14.01	14.62	15.15	15.75	17.31
	3H	9.34	9.85	10.48	10.99	12.57	16.04	16.55	17.19	17.70	19.28
	4H	9.42	9.89	10.57	11.03	12.63	16.80	17.27	17.95	18.40	20.00
	6H	9.43	9.83	10.58	10.99	12.58	17.32	17.73	18.48	18.89	20.47
	8H	9.40	9.78	10.55	10.93	12.53	17.48	17.86	18.63	19.01	20.61
	12H	9.35	9.69	10.52	10.85	12.46	17.56	17.90	18.73	19.07	20.68
8H	4H	10.85	11.23	12.01	12.38	13.99	16.85	17.22	18.00	18.37	19.98
	6H	11.09	11.40	12.26	12.59	14.19	17.46	17.77	18.64	18.97	20.57
	8H	11.10	11.38	12.29	12.55	14.17	17.68	17.95	18.86	19.12	20.74
	12H	11.07	11.30	12.25	12.47	14.13	17.81	18.05	19.00	19.22	20.88
12H	4H	10.99	11.33	12.16	12.49	14.10	16.79	17.13	17.96	18.30	19.91
	6H	11.34	11.62	12.52	12.79	14.41	17.44	17.72	18.63	18.89	20.51
	8H	11.41	11.64	12.59	12.81	14.47	17.66	17.90	18.85	19.07	20.73