

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: P938335

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938335
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

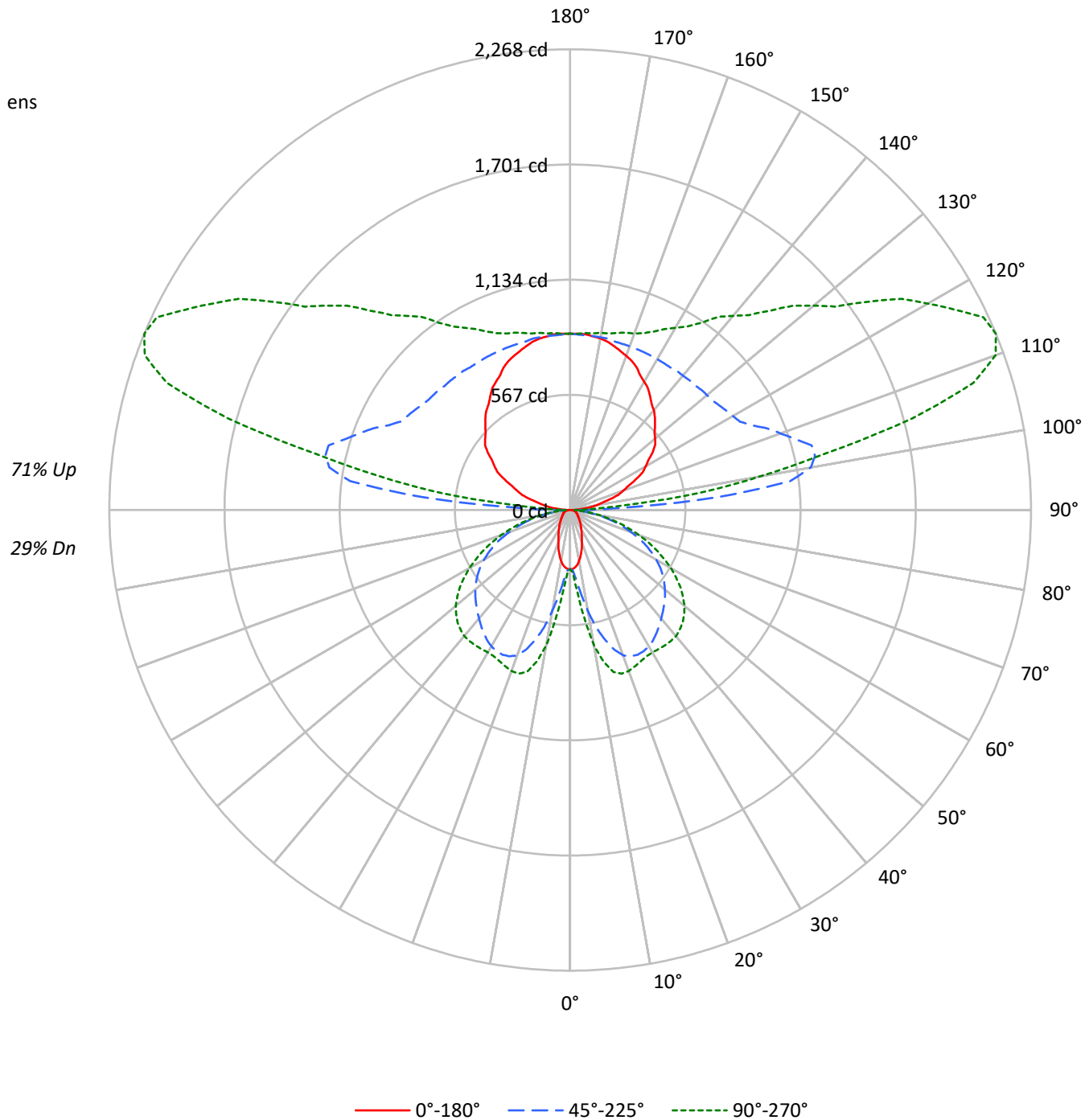
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7883.3 lumens
Efficiency: N/A
Efficacy: 124.0 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: Semi-Indirect

Input Watts (W): 63.6
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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CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-5000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2697	2697	2697
5°	2632	3115	3626
10°	2385	4538	6011
15°	2025	5924	7258
20°	1646	6861	7397
25°	1371	7174	7247
30°	1156	7214	7233
35°	1020	7088	7420
40°	887	6927	7614
45°	801	6806	7643
50°	733	6697	7517
55°	701	6540	7183
60°	715	6245	6658
65°	740	5799	5935
70°	782	5047	5014
75°	859	4104	3913
80°	917	2836	2636
85°	770	1497	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7643 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	0.5
10°-20°	166.7	2.1
20°-30°	291.5	3.7
30°-40°	375.3	4.8
40°-50°	419.1	5.3
50°-60°	401.4	5.1
60°-70°	318.1	4.0
70°-80°	187.1	2.4
80°-90°	55.3	0.7
90°-100°	423.4	5.4
100°-110°	1113.2	14.1
110°-120°	1154.3	14.6
120°-130°	925.9	11.7
130°-140°	726.5	9.2
140°-150°	557.6	7.1
150°-160°	401.6	5.1
160°-170°	245.7	3.1
170°-180°	83.0	1.1
0°-30°	495.8	6.3
0°-40°	871.0	11.0
0°-60°	1691.6	21.5
0°-90°	2252.1	28.6
90°-120°	2690.9	34.1
90°-150°	4900.8	62.2
90°-180°	5631.0	71.4
0°-180°	7883.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	291	291	291	291	291	
5°	283	304	342	387	401	26
15°	212	392	660	800	825	59
25°	136	444	786	821	822	62
35°	92	424	740	782	813	57
45°	63	338	654	750	783	48
55°	45	215	555	645	663	41
65°	36	114	412	464	470	35
75°	26	70	226	249	250	27
85°	9	22	56	62	63	10
90°	6	16	44	22	22	5
95°	56	219	729	376	256	62
105°	201	304	1231	1868	1743	213
115°	356	433	986	1966	2244	352
125°	496	556	897	1515	1787	440
135°	590	650	869	1223	1387	457
145°	685	729	858	1044	1125	429
155°	774	796	858	942	969	356
165°	835	846	858	891	902	236
175°	869	869	863	874	874	82
180°	869	869	869	869	869	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7	290.7
2.5°	290.7	290.7	292.6	293.5	295.4	296.3	298.2	300.0	305.6	306.6	308.5
5°	283.2	287.0	299.1	303.8	316.9	334.6	342.1	354.3	379.5	387.0	391.6
7.5°	272.0	280.4	310.3	317.8	350.5	397.3	416.9	443.1	483.2	502.9	518.8
10°	254.2	272.0	325.3	343.0	396.3	467.4	503.8	540.3	601.0	628.1	638.4
12.5°	234.6	263.6	341.2	365.5	442.1	545.9	589.8	630.0	699.2	735.6	741.2
15°	212.2	251.4	356.1	391.6	490.7	611.3	659.9	709.4	773.9	800.1	806.7
17.5°	192.5	242.1	370.1	407.5	528.1	670.2	719.7	760.9	813.2	831.0	835.6
20°	168.2	227.1	379.5	428.1	567.4	713.2	760.9	792.6	828.1	839.4	841.2
22.5°	150.5	211.2	385.1	435.6	593.5	739.4	779.5	804.8	829.1	832.8	833.8
25°	135.5	193.5	384.2	444.0	616.0	755.2	786.1	804.8	818.8	820.7	820.7
27.5°	121.5	173.9	380.4	445.9	632.8	759.0	783.3	796.4	802.9	806.7	806.7
30°	109.4	155.2	371.1	442.1	640.3	755.2	774.9	781.4	788.0	793.6	796.4
32.5°	100.0	137.4	357.1	434.6	641.2	745.9	759.9	763.7	773.0	786.1	790.8
35°	91.6	119.6	341.2	424.4	635.6	730.9	740.3	744.0	762.7	782.3	788.9
37.5°	83.2	106.6	320.6	406.6	627.2	713.2	719.7	726.3	755.2	778.6	786.1
40°	74.8	95.3	296.3	387.0	614.1	691.7	697.3	707.6	745.9	773.0	780.5
42.5°	68.2	86.0	270.1	366.4	597.3	667.4	675.8	690.7	734.7	763.7	772.1
45°	62.6	76.6	242.1	338.4	575.8	642.1	654.3	674.9	721.6	749.6	757.1
47.5°	57.0	70.1	213.1	309.4	552.4	616.9	632.8	656.2	703.8	730.9	737.5
50°	52.3	63.6	184.1	278.5	527.2	589.8	608.5	632.8	681.4	706.6	715.1
52.5°	48.6	58.0	157.0	247.7	498.2	561.8	583.3	608.5	654.3	678.6	684.2
55°	44.9	53.3	133.7	215.0	468.3	531.8	555.2	579.5	624.4	644.9	648.7
57.5°	43.0	49.5	114.0	184.1	436.5	498.2	524.4	546.8	588.9	604.8	608.5
60°	40.2	46.7	99.1	158.0	401.9	466.4	488.9	511.3	546.8	559.9	562.7
62.5°	37.4	44.9	87.9	132.7	366.4	429.0	451.5	472.0	501.9	511.3	515.0
65°	35.5	43.0	79.5	114.0	330.0	389.8	412.2	430.0	454.3	463.6	465.5
67.5°	33.6	41.1	72.9	98.1	293.5	350.5	367.3	384.2	402.9	412.2	413.1
70°	30.8	39.3	67.3	86.9	256.1	305.6	319.7	337.4	352.4	357.1	359.9
72.5°	29.0	36.5	63.6	78.5	217.8	262.7	275.7	286.0	299.1	303.8	303.8
75°	26.2	32.7	59.8	70.1	178.5	215.0	226.2	236.5	246.8	248.6	245.8
77.5°	23.4	29.0	51.4	58.9	139.3	170.1	179.5	185.1	193.5	195.4	196.3
80°	19.6	25.2	40.2	45.8	100.9	125.3	131.8	136.5	143.9	143.9	145.8
82.5°	15.0	19.6	29.0	32.7	68.2	86.0	91.6	94.4	99.1	99.1	99.1
85°	9.3	12.2	18.7	21.5	41.1	52.3	56.1	57.0	60.8	61.7	61.7
87.5°	4.7	6.5	12.2	13.1	21.5	27.1	27.1	29.0	29.0	28.0	27.1
90°	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5	22.2	22.2
92.5°	23.3	62.9	102.6	112.5	158.2	219.0	249.5	218.6	157.0	110.8	106.4
95°	56.0	128.5	201.1	219.2	389.2	616.0	729.4	650.8	493.8	376.0	362.7
97.5°	96.7	160.8	224.8	240.8	524.3	902.4	1091.4	1041.7	942.5	868.1	842.6
100°	128.2	186.3	244.3	258.8	573.4	992.9	1202.7	1206.3	1213.6	1219.0	1188.8
102.5°	155.1	209.3	263.4	277.0	596.1	1021.4	1234.2	1297.4	1423.8	1518.7	1492.8
105°	200.6	246.5	292.3	303.8	612.7	1024.6	1230.6	1372.3	1655.8	1868.5	1854.6
107.5°	247.2	289.9	332.8	343.4	615.9	979.1	1160.7	1358.4	1753.8	2050.4	2053.7
110°	278.6	317.2	355.9	365.6	611.2	938.6	1102.4	1323.5	1765.5	2097.0	2111.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.6	346.4	383.2	392.4	611.4	903.4	1049.4	1275.6	1728.0	2067.3	2089.5
115°	356.2	390.1	424.1	432.6	617.0	862.9	985.8	1203.7	1639.6	1966.4	1997.4
117.5°	402.3	433.1	464.0	471.7	628.5	837.6	942.1	1138.8	1532.1	1827.1	1861.4
120°	429.0	458.1	487.1	494.4	637.7	829.0	924.6	1104.3	1463.7	1733.2	1766.5
122.5°	455.3	484.6	513.9	521.2	651.2	824.6	911.2	1073.0	1396.6	1639.4	1672.2
125°	495.6	522.2	549.0	555.6	669.2	820.9	896.7	1034.1	1309.0	1515.2	1545.4
127.5°	528.2	555.1	582.0	588.8	687.3	818.7	884.4	1002.5	1238.5	1415.5	1441.0
130°	545.7	574.7	603.6	610.9	700.6	820.0	879.7	984.8	1194.9	1352.5	1376.1
132.5°	563.7	592.8	621.8	629.1	711.2	820.9	875.6	969.7	1157.8	1298.9	1320.0
135°	590.5	617.0	643.4	650.0	722.9	820.0	868.6	947.4	1104.9	1223.1	1241.3
137.5°	617.9	644.1	670.3	676.8	740.4	825.2	867.5	934.1	1067.2	1167.2	1182.0
140°	640.7	664.9	689.0	695.0	751.1	826.0	863.4	920.9	1035.9	1122.2	1136.1
142.5°	658.2	680.5	702.7	708.3	760.0	828.9	863.4	914.0	1015.0	1090.8	1102.8
145°	685.0	704.5	723.8	728.7	771.7	829.0	857.6	898.9	981.5	1043.5	1052.6
147.5°	711.8	730.8	749.6	754.4	788.8	834.7	857.6	890.1	955.1	1003.9	1011.4
150°	729.4	746.5	763.5	767.8	797.7	837.6	857.6	885.1	939.9	981.2	987.2
152.5°	747.4	760.4	773.3	776.6	803.6	839.6	857.6	881.1	928.0	963.1	967.7
155°	774.2	783.8	793.4	795.8	816.4	843.9	857.6	876.3	913.6	941.5	944.6
157.5°	794.0	803.4	812.6	815.0	829.2	848.2	857.6	872.1	901.1	922.8	925.0
160°	807.4	814.7	822.0	823.8	835.1	850.1	857.6	870.0	894.9	913.5	914.7
162.5°	820.9	826.3	831.7	833.1	841.2	852.2	857.6	868.1	889.1	904.8	905.9
165°	835.4	840.3	845.3	846.5	850.2	855.2	857.6	865.1	880.1	891.3	892.6
167.5°	848.8	851.1	853.5	854.0	857.1	861.3	863.4	868.3	878.2	885.5	886.1
170°	857.6	859.9	862.3	862.8	863.0	863.3	863.4	868.3	878.2	885.5	885.5
172.5°	862.3	862.7	863.3	863.4	863.4	863.4	863.4	867.3	875.1	880.9	880.4
175°	868.6	868.6	868.6	868.6	866.8	864.5	863.4	865.8	870.8	874.5	874.5
177.5°	868.6	868.6	868.6	868.6	867.3	865.5	864.6	866.6	870.4	873.3	872.7
180°	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	290.7	290.7
2.5°	310.3	308.5
5°	399.1	401.0
7.5°	537.5	536.5
10°	668.3	676.7
12.5°	763.7	765.5
15°	821.6	825.3
17.5°	844.0	845.0
20°	845.0	843.1
22.5°	834.7	832.8
25°	822.5	821.6
27.5°	811.3	812.3
30°	806.7	809.5
32.5°	806.7	811.3
35°	808.5	813.2
37.5°	807.6	813.2
40°	803.8	810.4
42.5°	793.6	798.2
45°	777.7	783.3
47.5°	757.1	760.9
50°	730.9	734.7
52.5°	698.2	699.2
55°	659.0	662.7
57.5°	616.9	617.8
60°	570.2	573.0
62.5°	520.6	520.6
65°	468.3	470.2
67.5°	414.1	418.7
70°	358.9	359.9
72.5°	304.7	304.7
75°	248.6	249.6
77.5°	195.4	195.4
80°	144.9	145.8
82.5°	100.0	101.9
85°	62.6	62.6
87.5°	29.0	26.2
90°	22.2	22.2
92.5°	88.7	71.1
95°	309.3	255.9
97.5°	741.1	639.5
100°	1067.8	946.8
102.5°	1389.2	1285.5
105°	1798.8	1743.1
107.5°	2067.2	2080.7
110°	2169.5	2227.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2178.7	2267.8
115°	2120.9	2244.5
117.5°	1998.4	2135.4
120°	1899.7	2032.9
122.5°	1803.6	1934.9
125°	1666.4	1787.4
127.5°	1543.1	1645.2
130°	1470.4	1564.7
132.5°	1404.4	1488.9
135°	1314.1	1386.9
137.5°	1241.7	1301.2
140°	1191.8	1247.6
142.5°	1150.7	1198.6
145°	1088.9	1125.2
147.5°	1041.4	1071.5
150°	1011.6	1035.9
152.5°	986.1	1004.4
155°	956.8	968.9
157.5°	933.5	942.1
160°	919.7	924.6
162.5°	910.6	915.3
165°	897.5	902.5
167.5°	888.2	890.2
170°	885.5	885.5
172.5°	878.6	876.8
175°	874.5	874.5
177.5°	870.7	868.6
180°	868.6	868.6



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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	2.05	2.76	3.16	3.88	5.42	15.19	15.90	16.30	17.02	18.56
	3H	2.74	3.38	3.87	4.51	6.07	17.00	17.64	18.13	18.77	20.33
	4H	3.03	3.65	4.17	4.77	6.33	17.63	18.24	18.76	19.36	20.93
	6H	3.28	3.84	4.42	4.97	6.54	18.04	18.60	19.18	19.73	21.31
	8H	3.34	3.88	4.49	5.02	6.59	18.15	18.68	19.30	19.83	21.40
	12H	3.35	3.86	4.50	5.00	6.59	18.21	18.71	19.36	19.85	21.44
4H	2H	9.22	9.83	10.36	10.95	12.52	15.45	16.06	16.59	17.18	18.75
	3H	10.78	11.29	11.93	12.44	14.02	17.46	17.97	18.61	19.12	20.70
	4H	10.87	11.34	12.02	12.47	14.07	18.21	18.68	19.36	19.82	21.42
	6H	10.87	11.27	12.03	12.43	14.02	18.73	19.13	19.89	20.29	21.88
	8H	10.84	11.22	12.00	12.37	13.98	18.88	19.26	20.04	20.41	22.02
	12H	10.79	11.13	11.96	12.30	13.91	18.96	19.30	20.13	20.46	22.08
8H	4H	12.29	12.66	13.44	13.82	15.42	18.26	18.64	19.42	19.79	21.40
	6H	12.52	12.83	13.70	14.03	15.63	18.87	19.18	20.05	20.38	21.98
	8H	12.54	12.81	13.72	13.98	15.61	19.08	19.35	20.26	20.53	22.15
	12H	12.50	12.74	13.69	13.91	15.57	19.21	19.45	20.40	20.62	22.27
12H	4H	12.42	12.76	13.59	13.93	15.54	18.21	18.55	19.38	19.71	21.32
	6H	12.78	13.05	13.96	14.22	15.84	18.85	19.12	20.03	20.30	21.92
	8H	12.84	13.08	14.03	14.25	15.90	19.07	19.31	20.25	20.48	22.13