

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: P938334

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938334
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-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

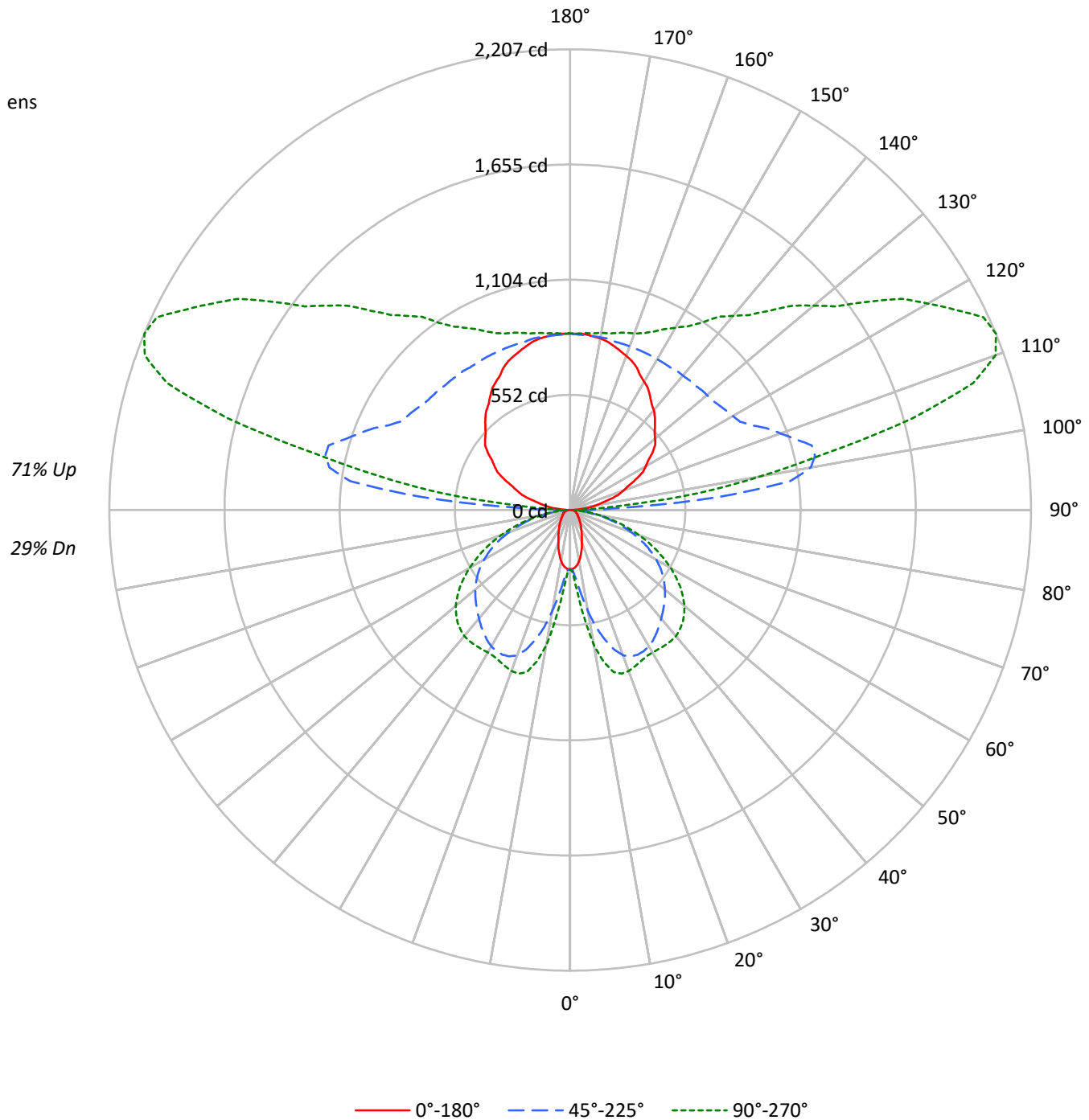
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7671.8 lumens
Efficiency: N/A
Efficacy: 120.6 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

TEST NUMBER: P938334
CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2625	2625	2625
5°	2562	3032	3528
10°	2321	4416	5850
15°	1971	5765	7063
20°	1602	6676	7199
25°	1335	6981	7053
30°	1124	7020	7039
35°	992	6898	7221
40°	864	6741	7410
45°	780	6623	7439
50°	714	6518	7315
55°	683	6364	6991
60°	696	6076	6479
65°	721	5642	5775
70°	762	4912	4879
75°	836	3994	3808
80°	894	2761	2566
85°	754	1457	1312

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7439 cd/sqm



TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	0.5
10°-20°	162.2	2.1
20°-30°	283.7	3.7
30°-40°	365.2	4.8
40°-50°	407.9	5.3
50°-60°	390.7	5.1
60°-70°	309.6	4.0
70°-80°	182.1	2.4
80°-90°	53.8	0.7
90°-100°	412.1	5.4
100°-110°	1083.4	14.1
110°-120°	1123.3	14.6
120°-130°	901.0	11.7
130°-140°	707.0	9.2
140°-150°	542.6	7.1
150°-160°	390.8	5.1
160°-170°	239.1	3.1
170°-180°	80.8	1.1
0°-30°	482.5	6.3
0°-40°	847.7	11.0
0°-60°	1646.2	21.5
0°-90°	2191.7	28.6
90°-120°	2618.8	34.1
90°-150°	4769.4	62.2
90°-180°	5480.0	71.4
0°-180°	7671.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	283	283	283	283	283	
5°	276	296	333	377	390	25
15°	206	381	642	779	803	57
25°	132	432	765	799	800	61
35°	89	413	720	761	791	56
45°	61	329	637	730	762	47
55°	44	209	540	628	645	40
65°	35	111	401	451	458	34
75°	26	68	220	242	243	27
85°	9	21	55	60	61	10
90°	6	16	43	22	22	5
95°	54	213	710	366	249	60
105°	195	296	1198	1818	1696	207
115°	347	421	959	1914	2184	342
125°	482	541	873	1474	1740	428
135°	575	633	845	1190	1350	445
145°	667	709	835	1016	1095	418
155°	754	774	835	916	943	346
165°	813	824	835	867	878	229
175°	845	845	840	851	851	80
180°	845	845	845	845	845	



TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9
2.5°	282.9	282.9	284.7	285.6	287.4	288.4	290.2	292.0	297.5	298.4	300.2
5°	275.6	279.3	291.1	295.6	308.4	325.7	332.9	344.8	369.3	376.6	381.1
7.5°	264.7	272.9	302.0	309.3	341.1	386.6	405.7	431.2	470.3	489.4	504.8
10°	247.4	264.7	316.6	333.8	385.7	454.8	490.3	525.8	584.9	611.3	621.3
12.5°	228.3	256.5	332.0	355.7	430.3	531.2	574.0	613.1	680.4	715.9	721.3
15°	206.5	244.7	346.6	381.1	477.6	594.9	642.2	690.4	753.2	778.6	785.0
17.5°	187.4	235.6	360.2	396.6	513.9	652.2	700.4	740.4	791.4	808.7	813.2
20°	163.7	221.0	369.3	416.6	552.1	694.1	740.4	771.4	805.9	816.9	818.7
22.5°	146.5	205.6	374.8	423.9	577.6	719.5	758.6	783.2	806.8	810.5	811.4
25°	131.9	188.3	373.9	432.1	599.5	735.0	765.0	783.2	796.8	798.7	798.7
27.5°	118.3	169.2	370.2	433.9	615.8	738.6	762.3	775.0	781.4	785.0	785.0
30°	106.4	151.0	361.1	430.3	623.1	735.0	754.1	760.5	766.8	772.3	775.0
32.5°	97.3	133.7	347.5	423.0	624.0	725.9	739.5	743.2	752.3	765.0	769.6
35°	89.1	116.4	332.0	413.0	618.6	711.3	720.4	724.1	742.3	761.4	767.7
37.5°	81.0	103.7	312.0	395.7	610.4	694.1	700.4	706.8	735.0	757.7	765.0
40°	72.8	92.8	288.4	376.6	597.6	673.1	678.6	688.6	725.9	752.3	759.5
42.5°	66.4	83.7	262.9	356.6	581.3	649.5	657.7	672.2	715.0	743.2	751.4
45°	60.9	74.6	235.6	329.3	560.3	624.9	636.7	656.8	702.2	729.5	736.8
47.5°	55.5	68.2	207.4	301.1	537.6	600.4	615.8	638.6	685.0	711.3	717.7
50°	50.9	61.9	179.2	271.1	513.0	574.0	592.2	615.8	663.1	687.7	695.9
52.5°	47.3	56.4	152.8	241.1	484.8	546.7	567.6	592.2	636.7	660.4	665.9
55°	43.7	51.8	130.1	209.2	455.7	517.6	540.3	564.0	607.6	627.6	631.3
57.5°	41.8	48.2	111.0	179.2	424.8	484.8	510.3	532.1	573.1	588.5	592.2
60°	39.1	45.5	96.4	153.7	391.1	453.9	475.7	497.6	532.1	544.9	547.6
62.5°	36.4	43.7	85.5	129.2	356.6	417.5	439.4	459.4	488.5	497.6	501.2
65°	34.6	41.8	77.3	111.0	321.1	379.3	401.1	418.4	442.1	451.2	453.0
67.5°	32.7	40.0	71.0	95.5	285.6	341.1	357.5	373.9	392.1	401.1	402.1
70°	30.0	38.2	65.5	84.6	249.2	297.5	311.1	328.4	342.9	347.5	350.2
72.5°	28.2	35.5	61.9	76.4	211.9	255.6	268.3	278.3	291.1	295.6	295.6
75°	25.5	31.8	58.2	68.2	173.7	209.2	220.1	230.1	240.1	242.0	239.2
77.5°	22.7	28.2	50.0	57.3	135.5	165.6	174.7	180.1	188.3	190.1	191.0
80°	19.1	24.6	39.1	44.6	98.2	121.9	128.3	132.8	140.1	140.1	141.9
82.5°	14.6	19.1	28.2	31.8	66.4	83.7	89.1	91.9	96.4	96.4	96.4
85°	9.1	11.8	18.2	20.9	40.0	50.9	54.6	55.5	59.1	60.0	60.0
87.5°	4.5	6.4	11.8	12.7	20.9	26.4	26.4	28.2	28.2	27.3	26.4
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°	22.6	61.2	99.9	109.5	153.9	213.1	242.8	212.8	152.8	107.8	103.5
95°	54.5	125.1	195.7	213.3	378.8	599.5	709.8	633.4	480.6	365.9	352.9
97.5°	94.1	156.5	218.8	234.3	510.2	878.2	1062.1	1013.8	917.2	844.8	820.0
100°	124.8	181.3	237.8	251.9	558.1	966.3	1170.4	1174.0	1181.1	1186.3	1156.9
102.5°	150.9	203.7	256.3	269.5	580.1	994.1	1201.1	1262.6	1385.7	1478.0	1452.8
105°	195.2	239.9	284.4	295.6	596.3	997.1	1197.6	1335.5	1611.4	1818.4	1804.8
107.5°	240.6	282.2	323.8	334.2	599.4	952.8	1129.6	1322.0	1706.8	1995.4	1998.7
110°	271.2	308.7	346.4	355.8	594.8	913.5	1072.8	1288.0	1718.1	2040.8	2054.9



TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	301.3	337.1	373.0	381.9	595.0	879.2	1021.2	1241.4	1681.6	2011.8	2033.5
115°	346.7	379.7	412.7	421.0	600.5	839.8	959.4	1171.4	1595.6	1913.7	1943.8
117.5°	391.5	421.5	451.5	459.0	611.6	815.1	916.8	1108.2	1491.0	1778.1	1811.5
120°	417.5	445.8	474.0	481.1	620.6	806.8	899.8	1074.6	1424.4	1686.7	1719.1
122.5°	443.1	471.6	500.1	507.2	633.7	802.5	886.8	1044.3	1359.2	1595.4	1627.3
125°	482.3	508.2	534.2	540.7	651.3	798.8	872.6	1006.3	1273.9	1474.5	1504.0
127.5°	514.0	540.2	566.4	573.0	668.9	796.8	860.7	975.6	1205.3	1377.6	1402.4
130°	531.0	559.2	587.4	594.5	681.8	798.0	856.2	958.4	1162.9	1316.2	1339.2
132.5°	548.6	576.9	605.1	612.2	692.1	798.8	852.1	943.7	1126.8	1264.0	1284.6
135°	574.7	600.5	626.1	632.6	703.5	798.0	845.3	922.0	1075.3	1190.3	1208.0
137.5°	601.4	626.8	652.3	658.7	720.5	803.0	844.2	909.0	1038.6	1135.9	1150.3
140°	623.6	647.0	670.5	676.3	731.0	803.8	840.2	896.2	1008.2	1092.1	1105.7
142.5°	640.6	662.2	683.9	689.3	739.6	806.7	840.2	889.4	987.8	1061.5	1073.2
145°	666.7	685.6	704.4	709.2	751.0	806.8	834.6	874.8	955.2	1015.5	1024.3
147.5°	692.7	711.2	729.5	734.2	767.6	812.3	834.6	866.2	929.5	977.0	984.2
150°	709.8	726.4	743.0	747.2	776.3	815.1	834.6	861.3	914.7	954.8	960.8
152.5°	727.3	740.0	752.5	755.7	782.0	817.0	834.6	857.4	903.1	937.3	941.7
155°	753.5	762.8	772.1	774.5	794.5	821.2	834.6	852.8	889.1	916.3	919.3
157.5°	772.7	781.8	790.8	793.1	806.9	825.4	834.6	848.7	876.9	898.1	900.2
160°	785.7	792.8	799.9	801.7	812.7	827.3	834.6	846.7	870.9	889.0	890.2
162.5°	798.8	804.1	809.4	810.8	818.7	829.3	834.6	844.8	865.2	880.5	881.6
165°	813.0	817.8	822.6	823.8	827.4	832.2	834.6	841.9	856.5	867.4	868.6
167.5°	826.0	828.3	830.6	831.1	834.1	838.2	840.2	845.1	854.6	861.8	862.3
170°	834.6	836.9	839.1	839.7	839.9	840.1	840.2	845.1	854.6	861.8	861.8
172.5°	839.1	839.6	840.1	840.2	840.2	840.2	840.2	844.1	851.6	857.2	856.8
175°	845.3	845.3	845.3	845.3	843.6	841.3	840.2	842.6	847.4	851.1	851.1
177.5°	845.3	845.3	845.3	845.3	844.1	842.3	841.4	843.3	847.1	849.9	849.3
180°	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3	845.3



TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	282.9	282.9
2.5°	302.0	300.2
5°	388.4	390.2
7.5°	523.0	522.1
10°	650.4	658.6
12.5°	743.2	745.0
15°	799.6	803.2
17.5°	821.4	822.3
20°	822.3	820.5
22.5°	812.3	810.5
25°	800.5	799.6
27.5°	789.6	790.5
30°	785.0	787.7
32.5°	785.0	789.6
35°	786.8	791.4
37.5°	785.9	791.4
40°	782.3	788.7
42.5°	772.3	776.8
45°	756.8	762.3
47.5°	736.8	740.4
50°	711.3	715.0
52.5°	679.5	680.4
55°	641.3	644.9
57.5°	600.4	601.3
60°	554.9	557.6
62.5°	506.7	506.7
65°	455.7	457.5
67.5°	403.0	407.5
70°	349.3	350.2
72.5°	296.5	296.5
75°	242.0	242.9
77.5°	190.1	190.1
80°	141.0	141.9
82.5°	97.3	99.2
85°	60.9	60.9
87.5°	28.2	25.5
90°	21.6	21.6
92.5°	86.3	69.2
95°	301.0	249.1
97.5°	721.3	622.4
100°	1039.2	921.4
102.5°	1351.9	1251.0
105°	1750.6	1696.4
107.5°	2011.8	2024.9
110°	2111.4	2167.8



TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2120.3	2207.0
115°	2064.1	2184.3
117.5°	1944.8	2078.2
120°	1848.7	1978.4
122.5°	1755.2	1883.0
125°	1621.7	1739.5
127.5°	1501.7	1601.1
130°	1430.9	1522.7
132.5°	1366.7	1449.0
135°	1278.9	1349.7
137.5°	1208.4	1266.3
140°	1159.9	1214.1
142.5°	1119.9	1166.4
145°	1059.7	1095.0
147.5°	1013.5	1042.8
150°	984.5	1008.2
152.5°	959.7	977.5
155°	931.1	942.9
157.5°	908.5	916.8
160°	895.0	899.8
162.5°	886.2	890.7
165°	873.4	878.3
167.5°	864.3	866.3
170°	861.8	861.8
172.5°	855.1	853.3
175°	851.1	851.1
177.5°	847.3	845.3
180°	845.3	845.3



TEST NUMBER: P938334

CATALOG NUMBER: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-4-4000K

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	1.96	2.67	3.07	3.79	5.33	15.09	15.81	16.21	16.92	18.47
	3H	2.65	3.29	3.77	4.41	5.98	16.91	17.55	18.03	18.67	20.23
	4H	2.94	3.55	4.08	4.68	6.24	17.53	18.15	18.67	19.27	20.83
	6H	3.18	3.75	4.33	4.87	6.45	17.95	18.51	19.09	19.63	21.21
	8H	3.25	3.78	4.39	4.92	6.50	18.05	18.59	19.20	19.73	21.30
	12H	3.26	3.77	4.41	4.90	6.50	18.11	18.62	19.26	19.75	21.35
4H	2H	9.13	9.74	10.27	10.86	12.43	15.35	15.96	16.49	17.08	18.65
	3H	10.68	11.19	11.83	12.34	13.92	17.37	17.88	18.52	19.03	20.61
	4H	10.77	11.24	11.92	12.38	13.98	18.12	18.59	19.27	19.73	21.32
	6H	10.77	11.18	11.93	12.34	13.93	18.64	19.04	19.79	20.20	21.79
	8H	10.75	11.12	11.90	12.28	13.88	18.79	19.16	19.94	20.32	21.92
	12H	10.70	11.04	11.87	12.20	13.81	18.87	19.21	20.04	20.37	21.98
8H	4H	12.19	12.57	13.35	13.72	15.33	18.17	18.54	19.32	19.70	21.30
	6H	12.43	12.74	13.61	13.93	15.54	18.78	19.09	19.95	20.28	21.88
	8H	12.45	12.72	13.63	13.89	15.51	18.99	19.26	20.17	20.43	22.05
	12H	12.41	12.64	13.59	13.82	15.47	19.12	19.35	20.30	20.52	22.18
12H	4H	12.33	12.67	13.50	13.83	15.44	18.11	18.45	19.29	19.62	21.23
	6H	12.68	12.95	13.86	14.13	15.75	18.76	19.03	19.94	20.20	21.83
	8H	12.74	12.98	13.93	14.15	15.81	18.97	19.21	20.16	20.38	22.04