

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: P938522

Luminaire Tested: SQ4-FB-150U-125D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938522
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

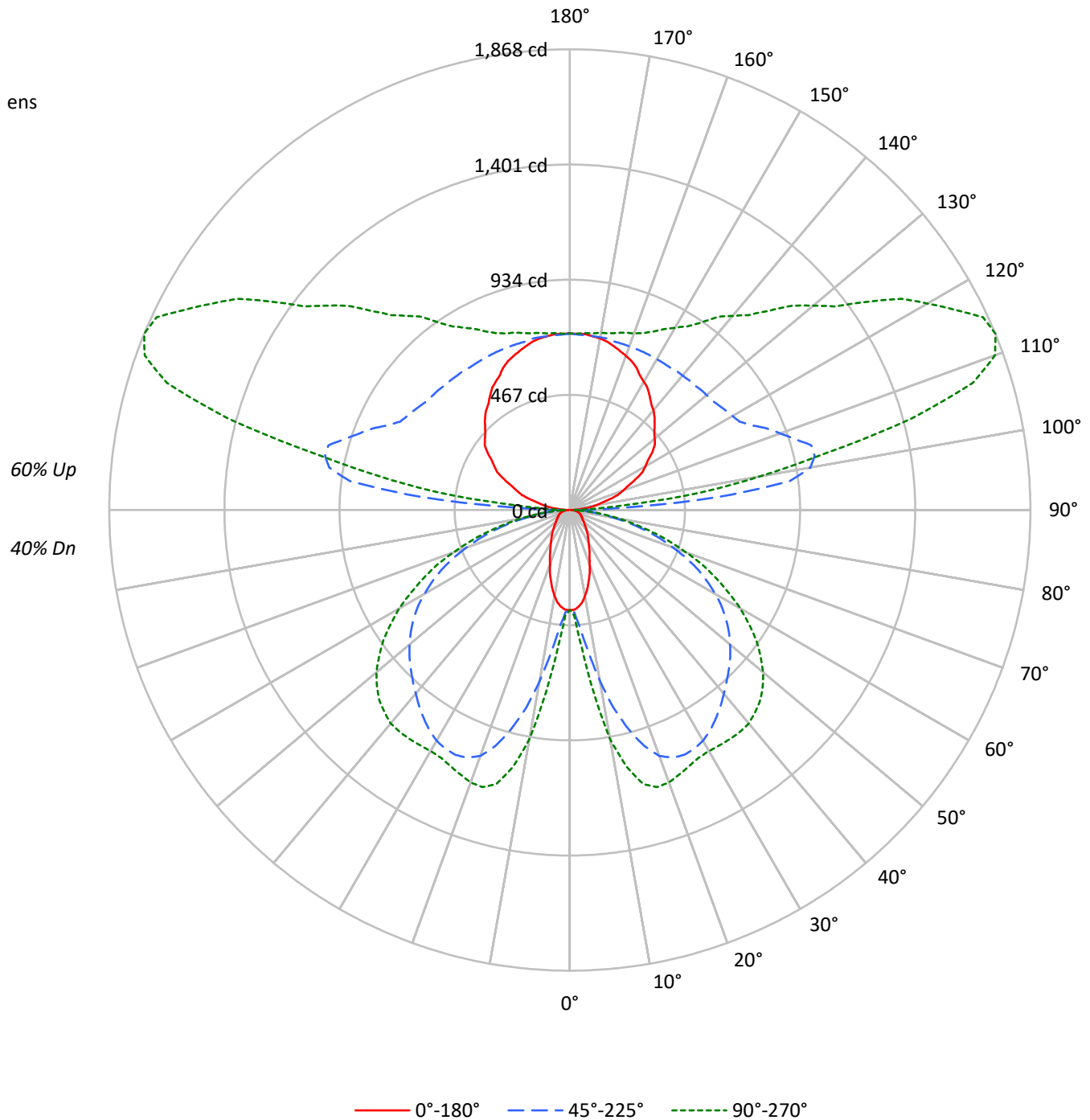
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7776.3 lumens
Efficiency: N/A
Efficacy: 93.5 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: General Diffuse

Input Watts (W): 83.2
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3760	3760	3760
5°	3669	4343	5054
10°	3325	6325	8379
15°	2823	8258	10118
20°	2295	9563	10312
25°	1913	10000	10102
30°	1611	10055	10083
35°	1422	9880	10343
40°	1237	9655	10612
45°	1118	9488	10655
50°	1023	9335	10478
55°	976	9116	10014
60°	998	8704	9280
65°	1032	8083	8271
70°	1092	7035	6990
75°	1197	5721	5454
80°	1278	3953	3676
85°	1076	2087	1881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	0.7
10°-20°	232.3	3.0
20°-30°	406.3	5.2
30°-40°	523.1	6.7
40°-50°	584.3	7.5
50°-60°	559.6	7.2
60°-70°	443.5	5.7
70°-80°	260.8	3.4
80°-90°	75.2	1.0
90°-100°	348.8	4.5
100°-110°	917.1	11.8
110°-120°	950.9	12.2
120°-130°	762.7	9.8
130°-140°	598.5	7.7
140°-150°	459.3	5.9
150°-160°	330.8	4.3
160°-170°	202.4	2.6
170°-180°	68.4	0.9
0°-30°	691.1	8.9
0°-40°	1214.1	15.6
0°-60°	2358.0	30.3
0°-90°	3137.4	40.3
90°-120°	2216.7	28.5
90°-150°	4037.3	51.9
90°-180°	4639.0	59.7
0°-180°	7776.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	395	423	477	539	559	36
15°	296	546	920	1115	1150	82
25°	189	619	1096	1144	1145	87
35°	128	592	1032	1091	1134	80
45°	87	472	912	1045	1092	68
55°	62	300	774	899	924	57
65°	50	159	575	646	655	49
75°	36	98	315	347	348	38
85°	13	30	78	86	87	14
90°	5	14	36	18	18	5
95°	46	181	601	310	211	51
105°	165	250	1014	1539	1436	175
115°	293	356	812	1620	1849	290
125°	408	458	739	1248	1472	362
135°	486	536	716	1008	1142	376
145°	564	600	706	860	927	354
155°	638	656	706	776	798	293
165°	688	697	706	734	743	194
175°	716	716	711	720	720	68
180°	716	716	716	716	716	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2
2.5°	405.2	405.2	407.8	409.1	411.7	413.0	415.6	418.3	426.0	427.4	430.0
5°	394.8	400.0	417.0	423.4	441.7	466.5	476.9	493.8	529.0	539.4	545.9
7.5°	379.1	390.9	432.6	443.0	488.6	553.7	581.1	617.6	673.6	700.9	723.1
10°	354.4	379.1	453.4	478.2	552.4	651.4	702.2	753.1	837.8	875.6	889.9
12.5°	327.0	367.4	475.6	509.4	616.3	760.9	822.1	878.2	974.6	1025.4	1033.2
15°	295.8	350.5	496.4	545.9	684.0	852.1	919.8	988.9	1078.8	1115.3	1124.4
17.5°	268.4	337.5	516.0	568.1	736.1	934.2	1003.2	1060.6	1133.5	1158.3	1164.8
20°	234.5	316.6	529.0	596.8	790.9	994.1	1060.6	1104.9	1154.4	1170.0	1172.6
22.5°	209.7	294.4	536.8	607.1	827.4	1030.6	1086.6	1121.8	1155.7	1160.9	1162.2
25°	189.0	269.7	535.5	618.8	858.6	1052.7	1095.8	1121.8	1141.4	1144.0	1144.0
27.5°	169.4	242.3	530.3	621.5	882.0	1058.0	1091.9	1110.1	1119.2	1124.4	1124.4
30°	152.5	216.3	517.3	616.3	892.5	1052.7	1080.1	1089.2	1098.3	1106.2	1110.1
32.5°	139.4	191.5	497.7	605.8	893.8	1039.7	1059.3	1064.4	1077.5	1095.8	1102.3
35°	127.7	166.8	475.6	591.5	886.0	1018.9	1031.9	1037.1	1063.1	1090.6	1099.6
37.5°	116.0	148.5	446.9	566.8	874.3	994.1	1003.2	1012.4	1052.7	1085.3	1095.8
40°	104.3	132.9	413.0	539.4	856.0	964.1	972.0	986.3	1039.7	1077.5	1087.9
42.5°	95.1	119.9	376.5	510.7	832.5	930.3	942.0	962.9	1024.1	1064.4	1076.2
45°	87.3	106.9	337.5	471.6	802.6	895.1	912.1	940.7	1005.9	1045.0	1055.4
47.5°	79.5	97.7	297.1	431.3	770.0	859.9	882.0	914.7	981.1	1018.9	1028.0
50°	73.0	88.6	256.6	388.2	734.8	822.1	848.2	882.0	949.8	985.0	996.8
52.5°	67.8	80.8	218.9	345.3	694.5	783.0	813.0	848.2	912.1	945.9	953.7
55°	62.5	74.2	186.3	299.7	652.7	741.4	773.9	807.8	870.3	899.0	904.2
57.5°	59.9	69.1	158.9	256.6	608.5	694.5	731.0	762.2	820.8	843.0	848.2
60°	56.1	65.1	138.1	220.2	560.3	650.2	681.4	712.7	762.2	780.5	784.3
62.5°	52.1	62.5	122.5	185.0	510.7	598.1	629.3	658.0	699.7	712.7	717.9
65°	49.5	59.9	110.7	158.9	459.9	543.3	574.6	599.4	633.2	646.3	648.9
67.5°	46.9	57.4	101.6	136.8	409.1	488.6	512.1	535.5	561.6	574.6	575.9
70°	43.0	54.7	93.8	121.2	357.0	426.0	445.6	470.3	491.2	497.7	501.7
72.5°	40.4	50.8	88.6	109.4	303.6	366.1	384.4	398.7	417.0	423.4	423.4
75°	36.5	45.6	83.4	97.7	248.9	299.7	315.3	329.6	344.0	346.6	342.7
77.5°	32.6	40.4	71.7	82.1	194.1	237.2	250.2	258.0	269.7	272.3	273.6
80°	27.3	35.2	56.1	63.8	140.7	174.6	183.7	190.2	200.7	200.7	203.3
82.5°	20.9	27.3	40.4	45.6	95.1	119.9	127.7	131.6	138.1	138.1	138.1
85°	13.0	16.9	26.0	30.0	57.4	73.0	78.2	79.5	84.7	86.0	86.0
87.5°	6.5	9.1	16.9	18.2	30.0	37.8	37.8	40.4	40.4	39.1	37.8
90°	4.8	8.6	12.5	13.5	21.2	31.4	36.5	32.4	24.3	18.2	18.2
92.5°	19.2	51.8	84.5	92.7	130.3	180.4	205.5	180.1	129.4	91.2	87.6
95°	46.1	105.9	165.6	180.6	320.6	507.4	600.8	536.2	406.8	309.8	298.8
97.5°	79.7	132.4	185.2	198.4	431.9	743.4	899.1	858.2	776.4	715.1	694.2
100°	105.6	153.5	201.3	213.2	472.4	818.0	990.8	993.8	999.8	1004.2	979.3
102.5°	127.7	172.4	217.0	228.2	491.0	841.5	1016.7	1068.8	1172.9	1251.1	1229.8
105°	165.2	203.0	240.8	250.2	504.7	844.1	1013.8	1130.5	1364.1	1539.2	1527.8
107.5°	203.7	238.9	274.1	282.9	507.4	806.6	956.2	1119.0	1444.8	1689.1	1691.8
110°	229.5	261.3	293.2	301.1	503.5	773.2	908.1	1090.2	1454.4	1727.5	1739.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	255.0	285.4	315.7	323.2	503.7	744.2	864.5	1050.8	1423.5	1703.0	1721.3
115°	293.4	321.4	349.3	356.4	508.3	710.9	812.1	991.6	1350.7	1619.9	1645.4
117.5°	331.4	356.8	382.2	388.5	517.7	690.0	776.1	938.1	1262.1	1505.1	1533.4
120°	353.4	377.4	401.2	407.3	525.4	682.9	761.7	909.7	1205.7	1427.8	1455.2
122.5°	375.1	399.2	423.3	429.4	536.5	679.3	750.7	884.0	1150.5	1350.5	1377.5
125°	408.3	430.2	452.2	457.7	551.3	676.2	738.7	851.9	1078.3	1248.2	1273.1
127.5°	435.1	457.3	479.5	485.0	566.2	674.4	728.6	825.8	1020.2	1166.1	1187.1
130°	449.5	473.4	497.3	503.3	577.1	675.5	724.7	811.3	984.4	1114.2	1133.6
132.5°	464.4	488.3	512.2	518.2	585.9	676.2	721.3	798.8	953.8	1070.0	1087.4
135°	486.5	508.3	530.0	535.5	595.5	675.5	715.6	780.5	910.2	1007.5	1022.6
137.5°	509.0	530.6	552.2	557.6	609.9	679.8	714.6	769.5	879.2	961.5	973.7
140°	527.8	547.7	567.6	572.5	618.8	680.4	711.2	758.6	853.4	924.5	935.9
142.5°	542.2	560.6	578.9	583.5	626.1	682.8	711.2	752.9	836.1	898.6	908.4
145°	564.3	580.3	596.3	600.3	635.7	682.9	706.5	740.5	808.6	859.6	867.1
147.5°	586.4	602.0	617.5	621.5	649.8	687.6	706.5	733.3	786.8	827.0	833.1
150°	600.8	614.9	628.9	632.5	657.1	690.0	706.5	729.1	774.3	808.3	813.3
152.5°	615.7	626.4	637.0	639.7	662.0	691.6	706.5	725.8	764.5	793.4	797.2
155°	637.8	645.7	653.6	655.6	672.5	695.2	706.5	721.9	752.6	775.6	778.2
157.5°	654.1	661.8	669.4	671.4	683.1	698.7	706.5	718.4	742.3	760.2	762.0
160°	665.1	671.1	677.1	678.6	687.9	700.3	706.5	716.7	737.2	752.5	753.5
162.5°	676.2	680.7	685.1	686.3	693.0	702.0	706.5	715.1	732.4	745.4	746.3
165°	688.2	692.2	696.3	697.3	700.4	704.5	706.5	712.6	725.0	734.3	735.3
167.5°	699.2	701.2	703.1	703.5	706.1	709.6	711.2	715.3	723.4	729.5	730.0
170°	706.5	708.4	710.3	710.8	710.9	711.2	711.2	715.3	723.4	729.5	729.5
172.5°	710.3	710.7	711.2	711.2	711.2	711.2	711.2	714.5	720.9	725.6	725.3
175°	715.6	715.6	715.6	715.6	714.1	712.2	711.2	713.3	717.3	720.4	720.4
177.5°	715.6	715.6	715.6	715.6	714.5	713.0	712.2	713.9	717.0	719.4	718.9
180°	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6	715.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	405.2	405.2
2.5°	432.6	430.0
5°	556.3	558.9
7.5°	749.2	747.9
10°	931.5	943.3
12.5°	1064.4	1067.1
15°	1145.3	1150.5
17.5°	1176.6	1177.9
20°	1177.9	1175.3
22.5°	1163.5	1160.9
25°	1146.5	1145.3
27.5°	1130.9	1132.2
30°	1124.4	1128.4
32.5°	1124.4	1130.9
35°	1127.0	1133.5
37.5°	1125.7	1133.5
40°	1120.5	1129.6
42.5°	1106.2	1112.6
45°	1084.0	1091.9
47.5°	1055.4	1060.6
50°	1018.9	1024.1
52.5°	973.3	974.6
55°	918.5	923.8
57.5°	859.9	861.2
60°	794.8	798.7
62.5°	725.7	725.7
65°	652.7	655.3
67.5°	577.2	583.7
70°	500.3	501.7
72.5°	424.7	424.7
75°	346.6	347.9
77.5°	272.3	272.3
80°	202.0	203.3
82.5°	139.4	142.0
85°	87.3	87.3
87.5°	40.4	36.5
90°	18.2	18.2
92.5°	73.1	58.6
95°	254.8	210.8
97.5°	610.5	526.8
100°	879.6	779.9
102.5°	1144.4	1059.0
105°	1481.9	1436.0
107.5°	1702.9	1714.0
110°	1787.2	1835.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1794.8	1868.2
115°	1747.2	1849.0
117.5°	1646.3	1759.1
120°	1564.9	1674.7
122.5°	1485.8	1594.0
125°	1372.8	1472.5
127.5°	1271.2	1355.3
130°	1211.3	1289.0
132.5°	1156.9	1226.5
135°	1082.5	1142.5
137.5°	1022.9	1071.9
140°	981.8	1027.7
142.5°	947.9	987.4
145°	897.0	926.9
147.5°	857.9	882.7
150°	833.4	853.4
152.5°	812.4	827.4
155°	788.2	798.2
157.5°	769.0	776.1
160°	757.6	761.7
162.5°	750.1	754.0
165°	739.4	743.4
167.5°	731.7	733.3
170°	729.5	729.5
172.5°	723.8	722.3
175°	720.4	720.4
177.5°	717.3	715.6
180°	715.6	715.6



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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	4.64	5.45	5.67	6.49	7.89	17.78	18.59	18.81	19.63	21.03
	3H	5.34	6.07	6.38	7.12	8.54	19.60	20.33	20.64	21.38	22.80
	4H	5.64	6.33	6.69	7.38	8.81	20.23	20.92	21.28	21.97	23.40
	6H	5.89	6.52	6.95	7.58	9.02	20.65	21.28	21.71	22.34	23.78
	8H	5.95	6.56	7.02	7.63	9.07	20.76	21.37	21.83	22.44	23.87
	12H	5.97	6.55	7.04	7.61	9.07	20.82	21.40	21.89	22.46	23.92
4H	2H	11.82	12.51	12.88	13.57	14.99	18.05	18.74	19.11	19.79	21.22
	3H	13.39	13.97	14.46	15.05	16.49	20.07	20.65	21.14	21.73	23.17
	4H	13.48	14.01	14.55	15.08	16.54	20.83	21.36	21.90	22.43	23.89
	6H	13.49	13.95	14.57	15.04	16.50	21.35	21.81	22.43	22.90	24.36
	8H	13.47	13.89	14.55	14.98	16.45	21.51	21.93	22.59	23.02	24.49
	12H	13.42	13.81	14.52	14.91	16.38	21.59	21.98	22.69	23.07	24.55
8H	4H	14.91	15.34	15.99	16.43	17.90	20.89	21.31	21.97	22.40	23.87
	6H	15.15	15.51	16.26	16.63	18.10	21.50	21.85	22.60	22.98	24.45
	8H	15.17	15.48	16.28	16.59	18.08	21.71	22.02	22.82	23.13	24.62
	12H	15.14	15.41	16.25	16.52	18.04	21.84	22.12	22.96	23.22	24.75
12H	4H	15.05	15.44	16.15	16.54	18.01	20.84	21.22	21.94	22.32	23.80
	6H	15.41	15.72	16.52	16.83	18.32	21.48	21.79	22.59	22.90	24.39
	8H	15.47	15.75	16.59	16.85	18.38	21.70	21.98	22.82	23.08	24.61