

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: P937698

Luminaire Tested: SQ4-FB-100U-100D-B35-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937698
REPORT IS A COMBINATION OF REPORTS P933567 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-B35-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

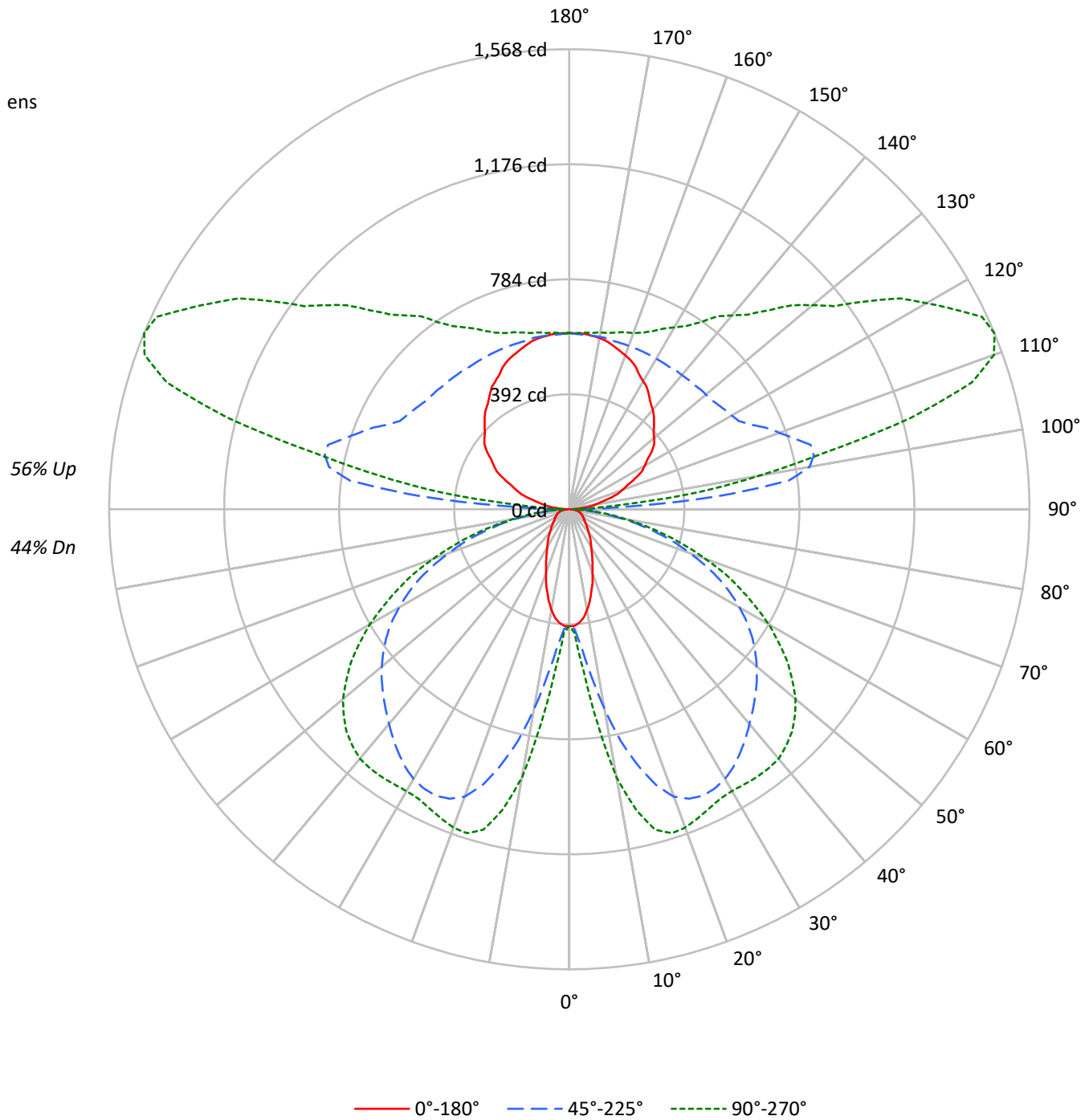
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6975.8 lumens
Efficiency: N/A
Efficacy: 120.3 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): 58
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44	44	44	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36	36	36	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30	30	30	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24	24	24	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20	20	20	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3606	4267	4967
10°	3267	6216	8233
15°	2773	8116	9942
20°	2255	9398	10133
25°	1879	9827	9927
30°	1582	9881	9908
35°	1397	9710	10165
40°	1215	9487	10429
45°	1098	9323	10470
50°	1005	9173	10297
55°	959	8959	9840
60°	978	8554	9120
65°	1013	7942	8129
70°	1071	6913	6867
75°	1177	5623	5360
80°	1254	3884	3611
85°	1060	2050	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10470 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	0.7
10°-20°	228.3	3.3
20°-30°	399.3	5.7
30°-40°	514.0	7.4
40°-50°	574.2	8.2
50°-60°	549.9	7.9
60°-70°	435.8	6.2
70°-80°	256.3	3.7
80°-90°	73.5	1.1
90°-100°	292.7	4.2
100°-110°	769.6	11.0
110°-120°	798.0	11.4
120°-130°	640.1	9.2
130°-140°	502.2	7.2
140°-150°	385.5	5.5
150°-160°	277.6	4.0
160°-170°	169.9	2.4
170°-180°	57.4	0.8
0°-30°	679.1	9.7
0°-40°	1193.1	17.1
0°-60°	2317.2	33.2
0°-90°	3082.7	44.2
90°-120°	1860.4	26.7
90°-150°	3388.2	48.6
90°-180°	3893.0	55.8
0°-180°	6975.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	549	36
15°	291	536	904	1096	1130	81
25°	186	608	1077	1124	1126	86
35°	126	581	1014	1072	1114	78
45°	86	464	896	1027	1073	66
55°	61	294	761	883	908	56
65°	49	156	565	635	644	48
75°	36	96	310	341	342	38
85°	13	30	77	84	86	14
90°	4	11	31	15	15	4
95°	39	152	504	260	177	43
105°	139	210	851	1292	1205	147
115°	246	299	682	1360	1552	243
125°	343	384	620	1048	1236	304
135°	408	449	601	846	959	316
145°	474	504	593	721	778	297
155°	535	550	593	651	670	246
165°	578	585	593	616	624	163
175°	601	601	597	605	605	57
180°	601	601	601	601	601	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	398.2	398.2	400.8	402.0	404.6	405.9	408.4	411.0	418.7	420.0	422.5
5°	388.0	393.1	409.7	416.1	434.0	458.3	468.6	485.3	519.9	530.0	536.4
7.5°	372.6	384.1	425.1	435.4	480.1	544.2	571.0	606.9	661.9	688.9	710.6
10°	348.3	372.6	445.5	469.9	542.8	640.2	690.1	740.0	823.3	860.4	874.5
12.5°	321.4	361.0	467.3	500.6	605.6	747.8	808.0	863.0	957.8	1007.7	1015.3
15°	290.6	344.4	487.8	536.4	672.2	837.4	904.0	971.8	1060.2	1096.0	1105.0
17.5°	263.8	331.6	507.0	558.2	723.5	918.0	985.9	1042.3	1114.0	1138.3	1144.7
20°	230.4	311.1	519.9	586.4	777.2	976.9	1042.3	1085.8	1134.4	1149.8	1152.3
22.5°	206.1	289.3	527.5	596.6	813.0	1012.8	1067.8	1102.4	1135.7	1140.8	1142.1
25°	185.7	265.0	526.3	608.1	843.8	1034.5	1076.8	1102.4	1121.6	1124.1	1124.1
27.5°	166.5	238.2	521.1	610.8	866.8	1039.6	1073.0	1090.9	1099.8	1105.0	1105.0
30°	149.8	212.5	508.3	605.6	877.0	1034.5	1061.4	1070.4	1079.4	1087.0	1090.9
32.5°	137.0	188.2	489.2	595.4	878.3	1021.7	1040.9	1046.0	1058.8	1076.8	1083.2
35°	125.5	163.9	467.3	581.3	870.6	1001.3	1014.1	1019.2	1044.8	1071.7	1080.6
37.5°	114.0	145.9	439.2	557.0	859.1	976.9	985.9	994.9	1034.5	1066.6	1076.8
40°	102.4	130.6	405.9	530.0	841.2	947.5	955.1	969.3	1021.7	1058.8	1069.1
42.5°	93.5	117.8	370.1	501.9	818.1	914.2	925.7	946.2	1006.4	1046.0	1057.6
45°	85.8	104.9	331.6	463.5	788.7	879.7	896.2	924.4	988.5	1026.8	1037.1
47.5°	78.1	96.0	292.0	423.8	756.7	845.1	866.8	898.8	964.2	1001.3	1010.2
50°	71.7	87.1	252.2	381.6	722.1	808.0	833.5	866.8	933.4	967.9	979.5
52.5°	66.6	79.4	215.1	339.3	682.5	769.5	798.9	833.5	896.2	929.6	937.2
55°	61.4	73.0	183.1	294.5	641.5	728.5	760.6	793.8	855.3	883.4	888.6
57.5°	58.9	67.8	156.2	252.2	598.0	682.5	718.3	749.0	806.6	828.4	833.5
60°	55.0	64.1	135.8	216.4	550.6	638.9	669.7	700.4	749.0	767.0	770.7
62.5°	51.3	61.4	120.3	181.8	501.9	587.7	618.4	646.6	687.6	700.4	705.5
65°	48.6	58.9	108.8	156.2	451.9	533.9	564.6	589.0	622.3	635.1	637.6
67.5°	46.1	56.3	99.9	134.4	402.0	480.1	503.2	526.3	551.8	564.6	565.9
70°	42.2	53.8	92.2	119.1	350.8	418.7	437.9	462.2	482.7	489.2	492.9
72.5°	39.7	49.9	87.1	107.6	298.4	359.8	377.7	391.8	409.7	416.1	416.1
75°	35.9	44.8	82.0	96.0	244.6	294.5	309.9	323.9	338.0	340.6	336.7
77.5°	32.0	39.7	70.4	80.6	190.8	233.0	245.8	253.5	265.0	267.6	268.9
80°	26.8	34.6	55.0	62.7	138.3	171.6	180.5	186.9	197.2	197.2	199.7
82.5°	20.4	26.8	39.7	44.8	93.5	117.8	125.5	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.3	71.7	76.8	78.1	83.2	84.5	84.5
87.5°	6.4	8.9	16.7	17.9	29.5	37.1	37.1	39.7	39.7	38.4	37.1
90°	4.1	7.3	10.5	11.2	17.7	26.4	30.6	27.2	20.4	15.3	15.3
92.5°	16.1	43.5	70.9	77.8	109.4	151.5	172.5	151.2	108.5	76.6	73.5
95°	38.7	88.9	139.1	151.6	269.1	425.8	504.2	449.9	341.4	260.0	250.8
97.5°	66.9	111.1	155.4	166.5	362.5	623.8	754.5	720.2	651.6	600.1	582.6
100°	88.7	128.8	168.9	179.0	396.5	686.5	831.5	834.0	839.0	842.7	821.8
102.5°	107.2	144.7	182.1	191.5	412.1	706.2	853.3	897.0	984.4	1049.9	1032.0
105°	138.7	170.4	202.0	210.0	423.6	708.4	850.9	948.8	1144.8	1291.8	1282.2
107.5°	170.9	200.5	230.0	237.4	425.8	676.8	802.4	939.2	1212.5	1417.6	1419.9
110°	192.6	219.4	246.0	252.7	422.5	648.9	762.1	914.9	1220.6	1449.7	1459.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	214.1	239.4	264.8	271.2	422.7	624.5	725.5	881.9	1194.6	1429.2	1444.6
115°	246.2	269.7	293.1	299.0	426.6	596.6	681.6	832.3	1133.5	1359.5	1380.8
117.5°	278.1	299.4	320.7	326.1	434.5	579.1	651.4	787.3	1059.2	1263.2	1286.8
120°	296.6	316.7	336.7	341.8	440.9	573.2	639.2	763.5	1011.9	1198.3	1221.3
122.5°	314.8	335.1	355.3	360.4	450.2	570.1	629.9	741.8	965.5	1133.3	1156.0
125°	342.6	361.0	379.5	384.1	462.7	567.4	619.9	714.9	904.9	1047.5	1068.4
127.5°	365.1	383.7	402.4	407.1	475.2	566.0	611.4	693.0	856.2	978.6	996.2
130°	377.2	397.3	417.3	422.4	484.3	567.0	608.2	680.9	826.2	935.1	951.4
132.5°	389.7	409.8	429.8	434.9	491.7	567.4	605.3	670.4	800.4	898.0	912.6
135°	408.3	426.6	444.9	449.4	499.8	567.0	600.6	655.0	763.9	845.5	858.1
137.5°	427.2	445.4	463.4	467.9	511.8	570.5	599.7	645.7	737.8	806.9	817.2
140°	442.9	459.6	476.3	480.4	519.3	571.0	596.9	636.6	716.2	775.9	785.5
142.5°	455.0	470.4	485.9	489.7	525.5	573.1	596.9	631.8	701.7	754.1	762.4
145°	473.6	487.0	500.4	503.8	533.5	573.2	592.9	621.5	678.6	721.4	727.7
147.5°	492.2	505.2	518.2	521.5	545.4	577.0	592.9	615.4	660.4	694.1	699.3
150°	504.2	516.0	527.8	530.8	551.6	579.2	592.9	611.9	649.8	678.3	682.5
152.5°	516.7	525.6	534.6	536.8	555.5	580.4	592.9	609.1	641.5	665.8	669.0
155°	535.3	541.9	548.6	550.2	564.4	583.4	592.9	605.8	631.6	650.9	653.0
157.5°	548.9	555.4	561.8	563.5	573.3	586.3	592.9	602.9	623.0	638.0	639.4
160°	558.2	563.3	568.2	569.5	577.3	587.7	592.9	601.6	618.7	631.6	632.5
162.5°	567.4	571.2	575.0	576.0	581.6	589.2	592.9	600.2	614.6	625.5	626.3
165°	577.5	580.9	584.3	585.2	587.8	591.2	592.9	598.2	608.5	616.3	617.2
167.5°	586.8	588.5	590.1	590.5	592.6	595.5	596.9	600.3	607.1	612.2	612.6
170°	592.9	594.5	596.1	596.5	596.6	596.8	596.9	600.3	607.1	612.2	612.2
172.5°	596.1	596.5	596.8	596.9	596.9	596.9	596.9	599.6	604.9	609.0	608.7
175°	600.6	600.6	600.6	600.6	599.3	597.7	596.9	598.6	602.0	604.6	604.6
177.5°	600.6	600.6	600.6	600.6	599.6	598.4	597.7	599.0	601.7	603.8	603.4
180°	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.2	398.2
2.5°	425.1	422.5
5°	546.7	549.3
7.5°	736.2	734.9
10°	915.5	926.9
12.5°	1046.0	1048.7
15°	1125.5	1130.5
17.5°	1156.2	1157.5
20°	1157.5	1154.9
22.5°	1143.4	1140.8
25°	1126.8	1125.5
27.5°	1111.3	1112.6
30°	1105.0	1108.8
32.5°	1105.0	1111.3
35°	1107.6	1114.0
37.5°	1106.2	1114.0
40°	1101.2	1110.1
42.5°	1087.0	1093.4
45°	1065.3	1073.0
47.5°	1037.1	1042.3
50°	1001.3	1006.4
52.5°	956.4	957.8
55°	902.6	907.8
57.5°	845.1	846.3
60°	781.0	784.9
62.5°	713.2	713.2
65°	641.5	644.0
67.5°	567.3	573.6
70°	491.7	492.9
72.5°	417.4	417.4
75°	340.6	341.9
77.5°	267.6	267.6
80°	198.5	199.7
82.5°	137.0	139.5
85°	85.8	85.8
87.5°	39.7	35.9
90°	15.3	15.3
92.5°	61.3	49.1
95°	213.9	176.9
97.5°	512.3	442.2
100°	738.2	654.6
102.5°	960.4	888.8
105°	1243.6	1205.1
107.5°	1429.2	1438.5
110°	1499.9	1540.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1506.2	1567.8
115°	1466.3	1551.8
117.5°	1381.6	1476.4
120°	1313.4	1405.4
122.5°	1246.9	1337.7
125°	1152.0	1235.8
127.5°	1066.9	1137.4
130°	1016.6	1081.8
132.5°	970.9	1029.4
135°	908.4	958.8
137.5°	858.4	899.6
140°	824.0	862.5
142.5°	795.5	828.7
145°	752.8	777.9
147.5°	720.1	740.8
150°	699.3	716.2
152.5°	681.7	694.5
155°	661.4	669.9
157.5°	645.5	651.4
160°	635.9	639.2
162.5°	629.6	632.8
165°	620.5	623.9
167.5°	614.0	615.4
170°	612.2	612.2
172.5°	607.5	606.2
175°	604.6	604.6
177.5°	602.0	600.6
180°	600.6	600.6



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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	4.98	5.82	5.97	6.84	8.18	18.12	18.96	19.11	19.97	21.32
	3H	5.68	6.44	6.69	7.46	8.83	19.94	20.70	20.95	21.72	23.09
	4H	5.98	6.70	7.00	7.72	9.10	20.57	21.29	21.59	22.32	23.69
	6H	6.23	6.89	7.26	7.92	9.31	20.99	21.65	22.02	22.68	24.07
	8H	6.30	6.93	7.33	7.98	9.36	21.10	21.74	22.14	22.78	24.17
	12H	6.31	6.91	7.36	7.96	9.37	21.16	21.77	22.21	22.81	24.22
4H	2H	12.17	12.88	13.19	13.91	15.29	18.39	19.11	19.42	20.13	21.51
	3H	13.73	14.34	14.77	15.39	16.78	20.42	21.02	21.46	22.08	23.47
	4H	13.83	14.38	14.87	15.43	16.84	21.17	21.73	22.22	22.77	24.19
	6H	13.84	14.31	14.89	15.38	16.79	21.70	22.18	22.75	23.25	24.65
	8H	13.82	14.26	14.87	15.32	16.75	21.86	22.30	22.91	23.36	24.79
	12H	13.77	14.17	14.84	15.25	16.68	21.94	22.34	23.01	23.42	24.85
8H	4H	15.26	15.71	16.32	16.77	18.19	21.23	21.68	22.29	22.74	24.17
	6H	15.50	15.87	16.58	16.97	18.40	21.85	22.22	22.93	23.32	24.74
	8H	15.52	15.85	16.61	16.93	18.37	22.06	22.39	23.15	23.47	24.91
	12H	15.49	15.77	16.58	16.86	18.34	22.20	22.48	23.29	23.57	25.05
12H	4H	15.40	15.80	16.47	16.88	18.31	21.19	21.59	22.26	22.67	24.09
	6H	15.76	16.08	16.84	17.17	18.61	21.83	22.16	22.92	23.24	24.69
	8H	15.83	16.11	16.92	17.19	18.67	22.06	22.34	23.15	23.42	24.90