

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: P937582

Luminaire Tested: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937582
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

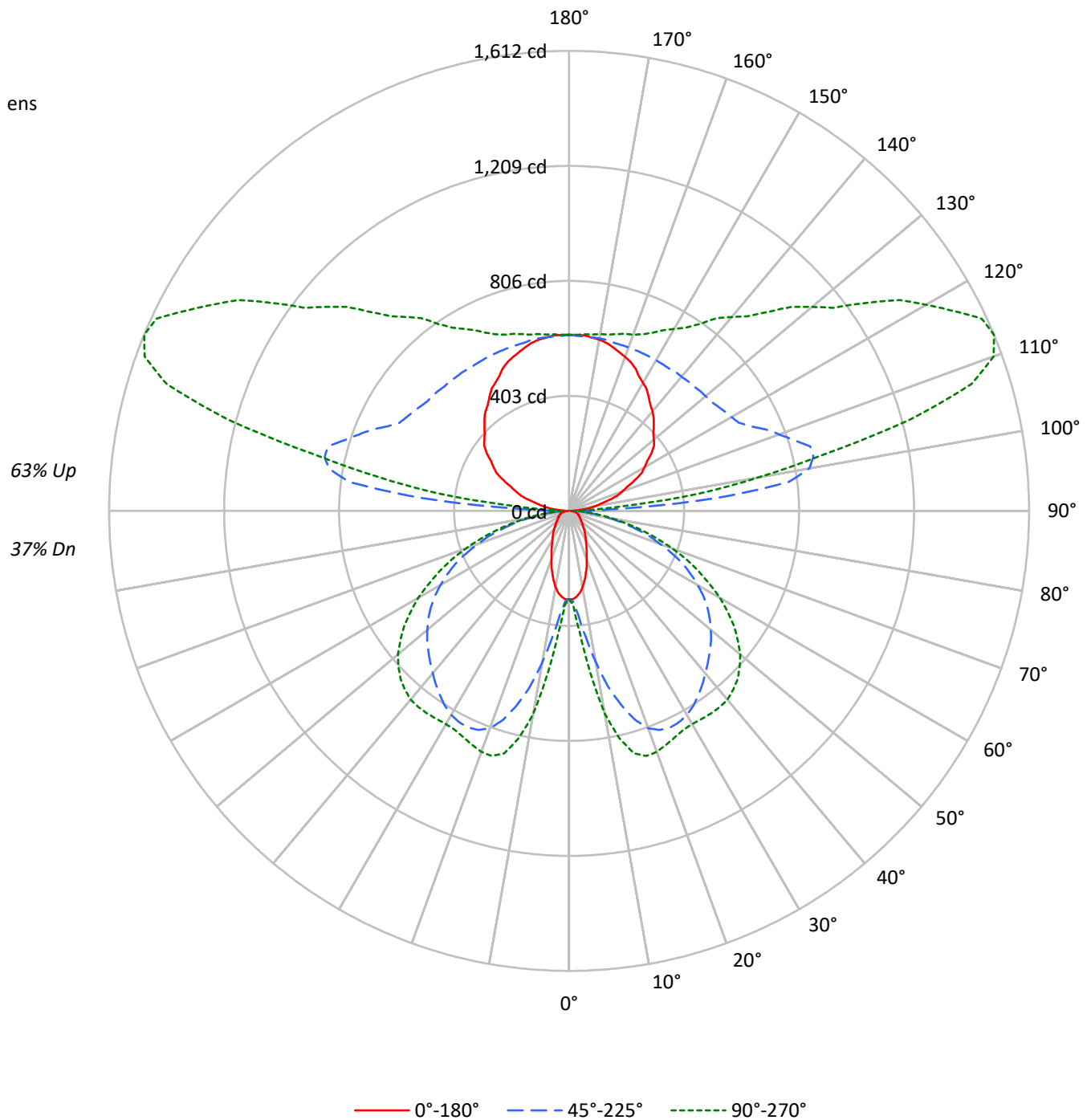
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6400.2 lumens
Efficiency: N/A
Efficacy: 130.1 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): 49.2
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

TEST NUMBER: P937582
CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2875	2875	2875
5°	2805	3319	3864
10°	2541	4835	6405
15°	2158	6313	7734
20°	1755	7310	7882
25°	1461	7644	7722
30°	1231	7687	7707
35°	1087	7552	7907
40°	946	7381	8112
45°	854	7253	8144
50°	782	7136	8010
55°	747	6968	7655
60°	761	6653	7093
65°	788	6178	6324
70°	835	5377	5343
75°	915	4373	4169
80°	978	3021	2810
85°	828	1596	1437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8144 cd/sqm



TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	0.6
10°-20°	177.6	2.8
20°-30°	310.6	4.9
30°-40°	399.9	6.2
40°-50°	446.6	7.0
50°-60°	427.8	6.7
60°-70°	339.0	5.3
70°-80°	199.3	3.1
80°-90°	57.7	0.9
90°-100°	300.9	4.7
100°-110°	791.1	12.4
110°-120°	820.2	12.8
120°-130°	657.9	10.3
130°-140°	516.2	8.1
140°-150°	396.2	6.2
150°-160°	285.4	4.5
160°-170°	174.6	2.7
170°-180°	59.0	0.9
0°-30°	528.3	8.3
0°-40°	928.1	14.5
0°-60°	1802.5	28.2
0°-90°	2398.6	37.5
90°-120°	1912.2	29.9
90°-150°	3482.6	54.4
90°-180°	4002.0	62.5
0°-180°	6400.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	310	310	310	310	310	
5°	302	324	364	412	427	28
15°	226	417	703	853	880	63
25°	144	473	838	874	876	67
35°	98	452	789	834	866	61
45°	67	361	697	799	835	52
55°	48	229	592	687	706	44
65°	38	122	439	494	501	38
75°	28	75	241	265	266	29
85°	10	23	60	66	67	11
90°	4	12	32	16	16	4
95°	40	156	518	267	182	44
105°	142	216	875	1328	1239	151
115°	253	307	701	1397	1595	250
125°	352	395	637	1077	1270	313
135°	420	462	617	869	986	325
145°	487	518	610	742	800	305
155°	550	566	610	669	688	253
165°	594	602	610	634	641	168
175°	617	617	614	621	621	59
180°	617	617	617	617	617	



TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8
2.5°	309.8	309.8	311.7	312.7	314.7	315.7	317.7	319.7	325.7	326.7	328.7
5°	301.8	305.8	318.7	323.7	337.6	356.6	364.5	377.5	404.4	412.3	417.3
7.5°	289.8	298.8	330.7	338.6	373.5	423.3	444.2	472.1	514.9	535.8	552.8
10°	270.9	289.8	346.6	365.5	422.3	498.0	536.8	575.7	640.4	669.3	680.3
12.5°	250.0	280.9	363.5	389.4	471.1	581.7	628.5	671.3	745.0	783.9	789.8
15°	226.1	267.9	379.5	417.3	522.9	651.4	703.2	756.0	824.7	852.6	859.5
17.5°	205.2	258.0	394.4	434.3	562.7	714.1	766.9	810.7	866.5	885.4	890.4
20°	179.3	242.0	404.4	456.2	604.6	759.9	810.7	844.6	882.5	894.4	896.4
22.5°	160.4	225.1	410.4	464.1	632.5	787.8	830.7	857.6	883.5	887.4	888.4
25°	144.4	206.2	409.4	473.1	656.4	804.8	837.6	857.6	872.5	874.5	874.5
27.5°	129.5	185.3	405.4	475.1	674.3	808.8	834.6	848.6	855.6	859.5	859.5
30°	116.5	165.3	395.4	471.1	682.3	804.8	825.7	832.7	839.6	845.6	848.6
32.5°	106.6	146.4	380.5	463.1	683.3	794.8	809.7	813.7	823.7	837.6	842.6
35°	97.6	127.5	363.5	452.2	677.3	778.9	788.8	792.8	812.7	833.7	840.6
37.5°	88.6	113.5	341.6	433.3	668.3	759.9	766.9	773.9	804.8	829.7	837.6
40°	79.7	101.6	315.7	412.3	654.4	737.0	743.0	754.0	794.8	823.7	831.7
42.5°	72.7	91.6	287.8	390.4	636.4	711.1	720.1	736.0	782.9	813.7	822.7
45°	66.7	81.7	258.0	360.6	613.5	684.3	697.2	719.1	768.9	798.8	806.8
47.5°	60.8	74.7	227.1	329.7	588.6	657.4	674.3	699.2	750.0	778.9	785.8
50°	55.8	67.7	196.2	296.8	561.7	628.5	648.4	674.3	726.1	753.0	761.9
52.5°	51.8	61.8	167.3	263.9	530.9	598.6	621.5	648.4	697.2	723.1	729.1
55°	47.8	56.8	142.4	229.1	499.0	566.7	591.6	617.5	665.3	687.2	691.2
57.5°	45.8	52.8	121.5	196.2	465.1	530.9	558.8	582.7	627.5	644.4	648.4
60°	42.8	49.8	105.6	168.3	428.3	497.0	520.9	544.8	582.7	596.6	599.6
62.5°	39.8	47.8	93.6	141.4	390.4	457.2	481.1	503.0	534.9	544.8	548.8
65°	37.8	45.8	84.7	121.5	351.6	415.3	439.2	458.2	484.1	494.0	496.0
67.5°	35.9	43.8	77.7	104.6	312.7	373.5	391.4	409.4	429.3	439.2	440.2
70°	32.9	41.8	71.7	92.6	272.9	325.7	340.6	359.6	375.5	380.5	383.5
72.5°	30.9	38.8	67.7	83.7	232.1	279.9	293.8	304.8	318.7	323.7	323.7
75°	27.9	34.9	63.7	74.7	190.2	229.1	241.0	252.0	262.9	264.9	261.9
77.5°	24.9	30.9	54.8	62.7	148.4	181.3	191.2	197.2	206.2	208.2	209.2
80°	20.9	26.9	42.8	48.8	107.6	133.5	140.4	145.4	153.4	153.4	155.4
82.5°	15.9	20.9	30.9	34.9	72.7	91.6	97.6	100.6	105.6	105.6	105.6
85°	10.0	12.9	19.9	22.9	43.8	55.8	59.8	60.8	64.7	65.7	65.7
87.5°	5.0	7.0	12.9	13.9	22.9	28.9	28.9	30.9	30.9	29.9	28.9
90°	4.2	7.5	10.8	11.6	18.2	27.1	31.5	28.0	21.0	15.7	15.7
92.5°	16.5	44.7	72.9	80.0	112.4	155.7	177.3	155.4	111.6	78.7	75.6
95°	39.7	91.3	142.9	155.8	276.6	437.6	518.2	462.4	350.9	267.2	257.8
97.5°	68.7	114.2	159.8	171.1	372.6	641.2	775.5	740.2	669.7	616.8	598.8
100°	91.1	132.4	173.6	184.0	407.6	705.7	854.7	857.3	862.3	866.2	844.7
102.5°	110.2	148.7	187.1	196.8	423.6	725.9	877.1	922.0	1011.8	1079.2	1060.7
105°	142.5	175.1	207.7	215.8	435.5	728.2	874.6	975.3	1176.7	1327.8	1317.9
107.5°	175.7	206.1	236.5	244.0	437.6	695.7	824.8	965.3	1246.3	1457.0	1459.4
110°	198.0	225.5	252.9	259.8	434.3	667.0	783.4	940.4	1254.6	1490.1	1500.5



TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	220.0	246.1	272.2	278.8	434.5	641.9	745.7	906.5	1227.9	1469.0	1484.8
115°	253.1	277.2	301.3	307.4	438.4	613.2	700.6	855.5	1165.1	1397.4	1419.3
117.5°	285.9	307.8	329.7	335.2	446.6	595.2	669.5	809.2	1088.7	1298.4	1322.7
120°	304.9	325.5	346.1	351.3	453.2	589.1	657.1	784.7	1040.1	1231.7	1255.4
122.5°	323.6	344.4	365.2	370.4	462.7	585.9	647.5	762.4	992.4	1164.9	1188.2
125°	352.2	371.1	390.0	394.8	475.6	583.3	637.1	734.8	930.2	1076.7	1098.2
127.5°	375.3	394.4	413.6	418.4	488.4	581.8	628.5	712.3	880.1	1005.9	1024.0
130°	387.7	408.4	429.0	434.2	497.8	582.8	625.2	699.9	849.2	961.1	977.9
132.5°	400.6	421.2	441.8	447.0	505.4	583.3	622.2	689.0	822.7	923.0	938.0
135°	419.7	438.4	457.3	461.9	513.7	582.8	617.3	673.3	785.1	869.1	882.1
137.5°	439.1	457.8	476.3	481.0	526.1	586.3	616.4	663.7	758.4	829.4	839.9
140°	455.3	472.4	489.5	493.8	533.8	586.9	613.5	654.4	736.1	797.5	807.4
142.5°	467.7	483.6	499.4	503.4	540.1	589.0	613.5	649.4	721.2	775.1	783.7
145°	486.7	500.6	514.3	517.8	548.4	589.1	609.5	638.8	697.5	741.5	748.0
147.5°	505.9	519.3	532.7	536.0	560.5	593.1	609.5	632.6	678.8	713.4	718.8
150°	518.2	530.4	542.5	545.6	566.9	595.3	609.5	629.0	667.9	697.2	701.5
152.5°	531.1	540.2	549.5	551.8	571.0	596.6	609.5	626.1	659.4	684.4	687.6
155°	550.2	557.0	563.8	565.5	580.2	599.7	609.5	622.7	649.2	669.0	671.2
157.5°	564.2	570.9	577.5	579.2	589.2	602.7	609.5	619.7	640.3	655.8	657.3
160°	573.8	579.0	584.1	585.3	593.4	604.1	609.5	618.3	635.9	649.2	650.1
162.5°	583.3	587.1	591.0	592.0	597.8	605.6	609.5	616.9	631.8	642.9	643.7
165°	593.6	597.1	600.6	601.5	604.2	607.7	609.5	614.8	625.5	633.5	634.4
167.5°	603.2	604.9	606.6	607.0	609.2	612.0	613.5	617.0	624.0	629.3	629.7
170°	609.5	611.0	612.7	613.1	613.2	613.4	613.5	617.0	624.0	629.3	629.3
172.5°	612.7	613.1	613.4	613.5	613.5	613.5	613.5	616.3	621.8	626.0	625.7
175°	617.3	617.3	617.3	617.3	616.0	614.3	613.5	615.3	618.8	621.4	621.4
177.5°	617.3	617.3	617.3	617.3	616.3	615.0	614.3	615.7	618.5	620.6	620.2
180°	617.3	617.3	617.3	617.3	617.3	617.3	617.3	617.3	617.3	617.3	617.3



TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	309.8	309.8
2.5°	330.7	328.7
5°	425.3	427.3
7.5°	572.7	571.7
10°	712.1	721.1
12.5°	813.7	815.7
15°	875.5	879.5
17.5°	899.4	900.4
20°	900.4	898.4
22.5°	889.4	887.4
25°	876.5	875.5
27.5°	864.5	865.5
30°	859.5	862.5
32.5°	859.5	864.5
35°	861.5	866.5
37.5°	860.5	866.5
40°	856.6	863.5
42.5°	845.6	850.6
45°	828.7	834.6
47.5°	806.8	810.7
50°	778.9	782.9
52.5°	744.0	745.0
55°	702.2	706.2
57.5°	657.4	658.4
60°	607.6	610.5
62.5°	554.8	554.8
65°	499.0	501.0
67.5°	441.2	446.2
70°	382.5	383.5
72.5°	324.7	324.7
75°	264.9	265.9
77.5°	208.2	208.2
80°	154.4	155.4
82.5°	106.6	108.6
85°	66.7	66.7
87.5°	30.9	27.9
90°	15.7	15.7
92.5°	63.0	50.5
95°	219.8	181.9
97.5°	526.6	454.5
100°	758.8	672.8
102.5°	987.1	913.5
105°	1278.3	1238.7
107.5°	1469.0	1478.6
110°	1541.7	1582.9



TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1548.2	1611.5
115°	1507.1	1595.0
117.5°	1420.1	1517.5
120°	1350.0	1444.6
122.5°	1281.7	1375.0
125°	1184.1	1270.2
127.5°	1096.6	1169.1
130°	1044.9	1111.9
132.5°	998.0	1058.1
135°	933.8	985.5
137.5°	882.4	924.7
140°	847.0	886.5
142.5°	817.7	851.8
145°	773.8	799.6
147.5°	740.1	761.4
150°	718.8	736.1
152.5°	700.7	713.8
155°	679.9	688.5
157.5°	663.4	669.5
160°	653.6	657.1
162.5°	647.1	650.4
165°	637.8	641.3
167.5°	631.1	632.6
170°	629.3	629.3
172.5°	624.4	623.1
175°	621.4	621.4
177.5°	618.8	617.3
180°	617.3	617.3



TEST NUMBER: P937582

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-STD-W-4-2700K

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	3.39	4.18	4.44	5.24	6.67	16.53	17.32	17.58	18.38	19.81
	3H	4.09	4.80	5.15	5.86	7.32	18.35	19.05	19.41	20.12	21.58
	4H	4.39	5.06	5.46	6.13	7.59	18.98	19.65	20.05	20.72	22.18
	6H	4.63	5.25	5.72	6.32	7.80	19.39	20.01	20.48	21.09	22.56
	8H	4.70	5.29	5.79	6.38	7.85	19.51	20.09	20.59	21.18	22.65
	12H	4.71	5.27	5.81	6.36	7.85	19.56	20.12	20.66	21.21	22.70
4H	2H	10.57	11.24	11.65	12.31	13.77	16.80	17.47	17.88	18.54	20.00
	3H	12.14	12.70	13.22	13.79	15.27	18.82	19.38	19.91	20.48	21.95
	4H	12.23	12.74	13.32	13.83	15.33	19.57	20.09	20.67	21.18	22.67
	6H	12.23	12.68	13.33	13.79	15.28	20.10	20.54	21.20	21.65	23.14
	8H	12.21	12.62	13.31	13.73	15.23	20.25	20.66	21.35	21.77	23.27
	12H	12.16	12.54	13.28	13.65	15.16	20.33	20.71	21.45	21.82	23.33
8H	4H	13.66	14.07	14.76	15.17	16.68	19.63	20.04	20.73	21.14	22.65
	6H	13.89	14.24	15.02	15.38	16.88	20.24	20.58	21.36	21.73	23.23
	8H	13.91	14.21	15.04	15.34	16.86	20.45	20.75	21.58	21.88	23.40
	12H	13.88	14.14	15.01	15.26	16.82	20.58	20.85	21.72	21.97	23.53
12H	4H	13.79	14.17	14.91	15.28	16.79	19.58	19.95	20.70	21.07	22.58
	6H	14.15	14.45	15.28	15.57	17.10	20.22	20.52	21.35	21.65	23.17
	8H	14.21	14.48	15.35	15.60	17.16	20.44	20.71	21.58	21.83	23.39