

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: P937202

Luminaire Tested: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937202
REPORT IS A COMBINATION OF REPORTS P933502 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

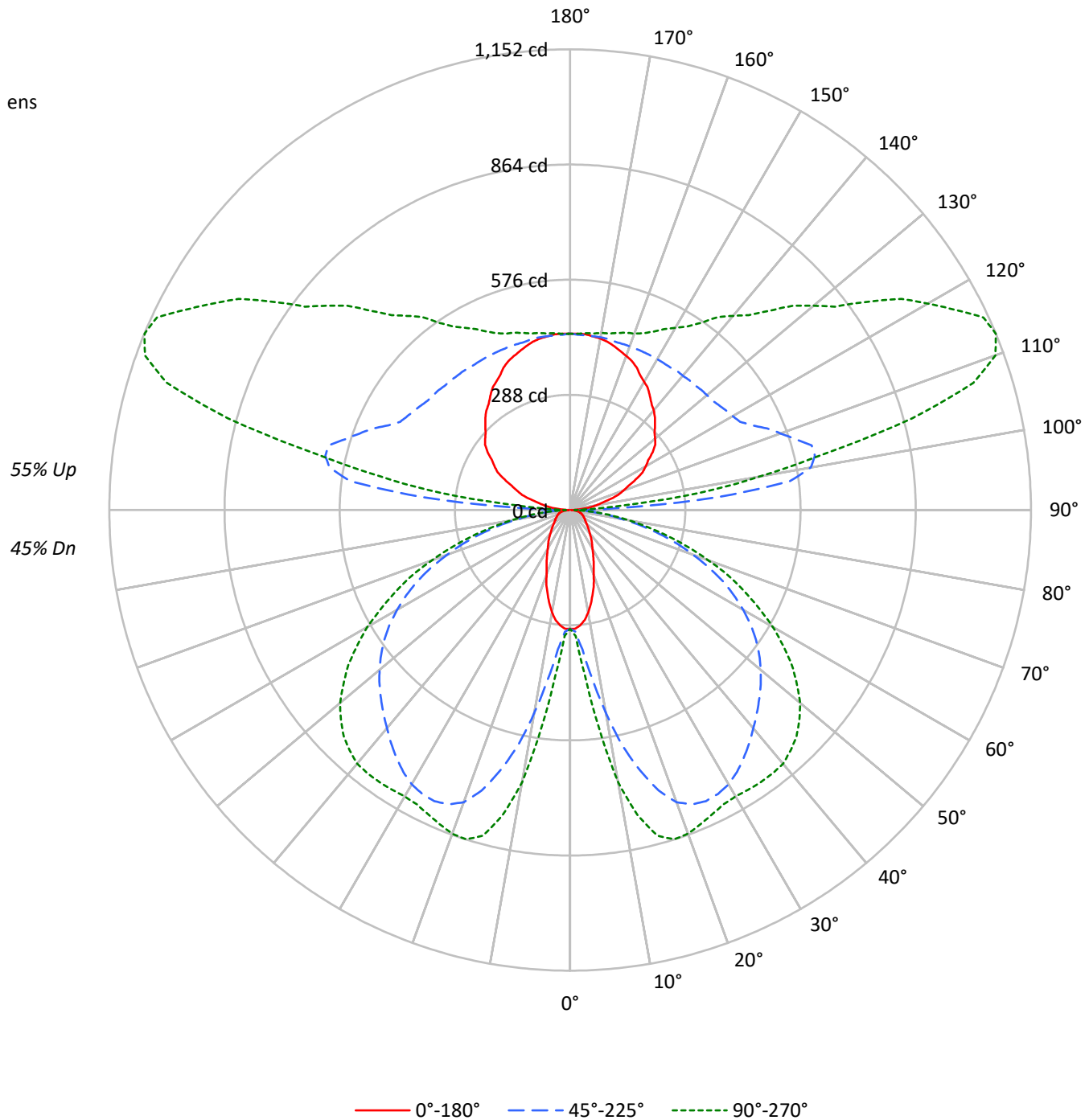
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5158.8 lumens
Efficiency: N/A
Efficacy: 121.7 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): 42.4
Input Voltage (V): NR
Input Current (Ain): 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: P937202
CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P937202

CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

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	45	45	45	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	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	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	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	17	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2690	3183	3704
10°	2437	4636	6141
15°	2069	6053	7416
20°	1682	7009	7558
25°	1402	7330	7404
30°	1180	7370	7390
35°	1042	7242	7581
40°	906	7077	7779
45°	819	6954	7809
50°	750	6842	7680
55°	715	6682	7340
60°	731	6380	6802
65°	756	5925	6064
70°	800	5156	5123
75°	876	4193	3998
80°	941	2899	2694
85°	787	1529	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7809 cd/sqm



TEST NUMBER: P937202

CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	0.7
10°-20°	170.3	3.3
20°-30°	297.8	5.8
30°-40°	383.4	7.4
40°-50°	428.2	8.3
50°-60°	410.2	8.0
60°-70°	325.1	6.3
70°-80°	191.1	3.7
80°-90°	54.8	1.1
90°-100°	215.0	4.2
100°-110°	565.3	11.0
110°-120°	586.1	11.4
120°-130°	470.2	9.1
130°-140°	368.9	7.2
140°-150°	283.1	5.5
150°-160°	203.9	4.0
160°-170°	124.8	2.4
170°-180°	42.2	0.8
0°-30°	506.5	9.8
0°-40°	889.9	17.3
0°-60°	1728.3	33.5
0°-90°	2299.3	44.6
90°-120°	1366.5	26.5
90°-150°	2488.7	48.2
90°-180°	2860.0	55.4
0°-180°	5158.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	289	310	350	395	410	27
15°	217	400	674	818	843	60
25°	138	454	803	838	839	64
35°	94	434	756	799	831	58
45°	64	346	668	766	800	50
55°	46	220	567	659	677	42
65°	36	116	421	474	480	36
75°	27	72	231	254	255	28
85°	10	22	57	63	64	10
90°	3	8	22	11	11	3
95°	28	111	370	191	130	32
105°	102	154	625	949	885	108
115°	181	220	501	998	1140	179
125°	252	282	455	769	908	223
135°	300	330	441	621	704	232
145°	348	370	436	530	571	218
155°	393	404	436	478	492	181
165°	424	430	436	453	458	120
175°	441	441	438	444	444	42
180°	441	441	441	441	441	



TEST NUMBER: P937202

CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0
2.5°	297.0	297.0	298.9	299.9	301.8	302.7	304.6	306.6	312.3	313.2	315.2
5°	289.4	293.2	305.6	310.4	323.7	341.9	349.5	361.9	387.7	395.4	400.1
7.5°	277.9	286.5	317.1	324.7	358.1	405.9	425.9	452.7	493.7	513.8	530.0
10°	259.8	277.9	332.3	350.5	404.9	477.5	514.7	552.0	614.1	641.8	652.3
12.5°	239.7	269.3	348.6	373.4	451.7	557.7	602.6	643.7	714.3	751.6	757.3
15°	216.8	256.9	363.9	400.1	501.4	624.6	674.2	724.8	790.7	817.5	824.2
17.5°	196.7	247.3	378.2	416.4	539.6	684.7	735.4	777.4	830.8	849.0	853.8
20°	171.9	232.1	387.7	437.4	579.7	728.7	777.4	809.8	846.1	857.6	859.5
22.5°	153.8	215.8	393.5	445.0	606.4	755.4	796.5	822.3	847.1	850.9	851.9
25°	138.5	197.7	392.5	453.6	629.3	771.6	803.2	822.3	836.6	838.5	838.5
27.5°	124.2	177.6	388.7	455.5	646.5	775.5	800.3	813.7	820.3	824.2	824.2
30°	111.7	158.5	379.1	451.7	654.2	771.6	791.7	798.4	805.1	810.8	813.7
32.5°	102.2	140.4	364.8	444.1	655.1	762.1	776.4	780.2	789.8	803.2	807.9
35°	93.6	122.2	348.6	433.6	649.4	746.8	756.4	760.2	779.3	799.3	806.0
37.5°	85.0	108.9	327.6	415.4	640.8	728.7	735.4	742.0	771.6	795.5	803.2
40°	76.4	97.4	302.7	395.4	627.4	706.7	712.4	722.9	762.1	789.8	797.4
42.5°	69.7	87.9	276.0	374.4	610.2	681.9	690.5	705.7	750.6	780.2	788.8
45°	64.0	78.3	247.3	345.7	588.3	656.1	668.5	689.5	737.3	765.9	773.6
47.5°	58.3	71.6	217.7	316.1	564.4	630.3	646.5	670.4	719.1	746.8	753.5
50°	53.5	64.9	188.1	284.6	538.6	602.6	621.7	646.5	696.2	722.0	730.6
52.5°	49.7	59.2	160.4	253.1	509.0	574.0	595.9	621.7	668.5	693.3	699.1
55°	45.8	54.4	136.6	219.6	478.5	543.4	567.3	592.1	637.9	658.9	662.8
57.5°	43.9	50.6	116.5	188.1	446.0	509.0	535.8	558.7	601.6	617.9	621.7
60°	41.1	47.8	101.2	161.4	410.6	476.5	499.5	522.4	558.7	572.0	574.9
62.5°	38.2	45.8	89.8	135.6	374.4	438.3	461.3	482.3	512.8	522.4	526.2
65°	36.3	43.9	81.2	116.5	337.1	398.2	421.2	439.3	464.1	473.7	475.6
67.5°	34.4	42.0	74.5	100.3	299.9	358.1	375.3	392.5	411.6	421.2	422.1
70°	31.5	40.1	68.8	88.8	261.7	312.3	326.6	344.8	360.0	364.8	367.7
72.5°	29.6	37.2	64.9	80.2	222.5	268.4	281.7	292.2	305.6	310.4	310.4
75°	26.7	33.4	61.1	71.6	182.4	219.6	231.1	241.6	252.1	254.0	251.2
77.5°	23.9	29.6	52.5	60.2	142.3	173.8	183.4	189.1	197.7	199.6	200.5
80°	20.1	25.8	41.1	46.8	103.1	128.0	134.7	139.4	147.1	147.1	149.0
82.5°	15.3	20.1	29.6	33.4	69.7	87.9	93.6	96.5	101.2	101.2	101.2
85°	9.5	12.4	19.1	22.0	42.0	53.5	57.3	58.3	62.1	63.0	63.0
87.5°	4.8	6.7	12.4	13.4	22.0	27.7	27.7	29.6	29.6	28.6	27.7
90°	3.0	5.3	7.7	8.3	13.1	19.4	22.5	20.1	15.0	11.3	11.3
92.5°	11.8	32.0	52.0	57.1	80.3	111.3	126.7	111.1	79.7	56.2	54.1
95°	28.5	65.3	102.2	111.4	197.7	312.8	370.3	330.4	250.7	190.9	184.1
97.5°	49.2	81.7	114.1	122.2	266.3	458.2	554.2	529.0	478.6	440.8	427.9
100°	65.1	94.5	124.1	131.4	291.2	504.2	610.7	612.5	616.3	619.0	603.7
102.5°	78.8	106.3	133.7	140.6	302.6	518.8	626.8	658.9	723.0	771.2	758.0
105°	101.8	125.1	148.4	154.2	311.1	520.4	625.0	697.0	840.9	948.8	941.7
107.5°	125.5	147.3	168.9	174.4	312.8	497.2	589.4	689.8	890.5	1041.1	1042.9
110°	141.5	161.1	180.8	185.7	310.4	476.6	559.8	672.0	896.5	1064.8	1072.2



TEST NUMBER: P937202

CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.2	175.9	194.5	199.2	310.5	458.8	532.9	647.8	877.5	1049.7	1061.1
115°	180.9	198.1	215.4	219.6	313.3	438.2	500.6	611.3	832.6	998.5	1014.2
117.5°	204.3	219.9	235.6	239.5	319.2	425.3	478.4	578.3	777.9	927.8	945.2
120°	217.9	232.6	247.3	251.1	323.8	421.0	469.5	560.8	743.3	880.1	897.0
122.5°	231.2	246.1	260.9	264.6	330.6	418.7	462.7	544.8	709.2	832.5	849.2
125°	251.6	265.2	278.8	282.1	339.9	416.9	455.3	525.2	664.8	769.4	784.8
127.5°	268.3	281.9	295.6	299.0	349.1	415.8	449.1	509.1	629.0	718.8	731.8
130°	277.1	291.8	306.6	310.3	355.7	416.4	446.7	500.1	606.8	686.8	698.8
132.5°	286.3	301.0	315.7	319.4	361.2	416.9	444.6	492.4	588.0	659.6	670.3
135°	299.9	313.2	326.7	330.0	367.1	416.5	441.1	481.1	561.2	621.1	630.4
137.5°	313.8	327.1	340.4	343.7	376.0	419.1	440.5	474.3	542.0	592.7	600.2
140°	325.4	337.6	349.8	352.9	381.4	419.4	438.4	467.7	526.0	569.8	576.9
142.5°	334.2	345.5	356.8	359.7	385.9	421.0	438.4	464.1	515.4	553.9	560.0
145°	347.8	357.7	367.6	370.1	391.8	421.0	435.5	456.5	498.4	529.9	534.5
147.5°	361.5	371.0	380.7	383.1	400.5	423.8	435.5	452.0	485.0	509.8	513.6
150°	370.3	379.0	387.7	389.9	405.1	425.4	435.5	449.4	477.3	498.2	501.3
152.5°	379.5	386.1	392.7	394.3	408.1	426.3	435.5	447.4	471.2	489.1	491.3
155°	393.2	398.0	402.8	404.1	414.6	428.5	435.5	444.9	463.8	478.1	479.6
157.5°	403.2	408.0	412.8	413.9	421.1	430.7	435.5	442.8	457.5	468.6	469.7
160°	410.0	413.7	417.3	418.3	424.0	431.7	435.5	441.8	454.5	463.9	464.5
162.5°	416.9	419.6	422.4	423.1	427.2	432.7	435.5	440.8	451.4	459.5	460.0
165°	424.2	426.7	429.2	429.8	431.8	434.2	435.5	439.3	446.9	452.7	453.3
167.5°	431.0	432.1	433.4	433.7	435.3	437.4	438.4	440.9	446.0	449.7	450.0
170°	435.5	436.6	437.9	438.2	438.2	438.3	438.4	440.9	446.0	449.7	449.7
172.5°	437.9	438.2	438.3	438.4	438.4	438.4	438.4	440.4	444.4	447.3	447.1
175°	441.1	441.1	441.1	441.1	440.3	439.0	438.4	439.7	442.2	444.1	444.1
177.5°	441.1	441.1	441.1	441.1	440.4	439.5	439.0	440.0	442.0	443.5	443.2
180°	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1



TEST NUMBER: P937202

CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	297.0	297.0
2.5°	317.1	315.2
5°	407.8	409.7
7.5°	549.1	548.2
10°	682.8	691.4
12.5°	780.2	782.1
15°	839.4	843.3
17.5°	862.4	863.3
20°	863.3	861.4
22.5°	852.8	850.9
25°	840.4	839.4
27.5°	828.9	829.9
30°	824.2	827.0
32.5°	824.2	828.9
35°	826.1	830.8
37.5°	825.1	830.8
40°	821.3	828.0
42.5°	810.8	815.6
45°	794.6	800.3
47.5°	773.6	777.4
50°	746.8	750.6
52.5°	713.4	714.3
55°	673.3	677.1
57.5°	630.3	631.3
60°	582.6	585.4
62.5°	531.9	531.9
65°	478.5	480.4
67.5°	423.1	427.8
70°	366.7	367.7
72.5°	311.3	311.3
75°	254.0	255.0
77.5°	199.6	199.6
80°	148.0	149.0
82.5°	102.2	104.1
85°	64.0	64.0
87.5°	29.6	26.7
90°	11.3	11.3
92.5°	45.1	36.1
95°	157.1	130.0
97.5°	376.4	324.8
100°	542.2	480.7
102.5°	705.4	652.7
105°	913.5	885.2
107.5°	1049.7	1056.6
110°	1101.7	1131.2



TEST NUMBER: P937202

CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1106.4	1151.6
115°	1077.0	1139.8
117.5°	1014.8	1084.4
120°	964.6	1032.3
122.5°	915.8	982.6
125°	846.2	907.6
127.5°	783.6	835.4
130°	746.7	794.6
132.5°	713.2	756.1
135°	667.4	704.3
137.5°	630.5	660.8
140°	605.3	633.5
142.5°	584.3	608.6
145°	552.9	571.4
147.5°	528.9	544.2
150°	513.7	526.1
152.5°	500.7	510.1
155°	485.8	492.0
157.5°	474.1	478.4
160°	467.0	469.5
162.5°	462.4	464.8
165°	455.8	458.3
167.5°	451.0	452.1
170°	449.7	449.7
172.5°	446.2	445.2
175°	444.1	444.1
177.5°	442.2	441.1
180°	441.1	441.1



TEST NUMBER: P937202
 CATALOG NUMBER: SQ4-FB-075U-075D-B40-1D-UNV-STD-W-4

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	4.00	4.84	4.99	5.85	7.20	17.14	17.98	18.13	18.99	20.34
	3H	4.70	5.46	5.71	6.48	7.85	18.96	19.72	19.96	20.74	22.10
	4H	5.00	5.72	6.02	6.74	8.12	19.59	20.31	20.61	21.34	22.71
	6H	5.25	5.91	6.28	6.94	8.33	20.01	20.68	21.04	21.70	23.09
	8H	5.32	5.95	6.35	7.00	8.38	20.12	20.76	21.16	21.80	23.18
	12H	5.33	5.94	6.37	6.98	8.38	20.18	20.79	21.22	21.83	23.23
4H	2H	11.19	11.91	12.21	12.93	14.30	17.41	18.13	18.43	19.15	20.53
	3H	12.75	13.36	13.79	14.41	15.80	19.44	20.04	20.47	21.09	22.48
	4H	12.85	13.40	13.89	14.45	15.85	20.19	20.75	21.24	21.79	23.20
	6H	12.86	13.34	13.91	14.40	15.81	20.72	21.20	21.77	22.27	23.67
	8H	12.84	13.28	13.89	14.34	15.76	20.88	21.32	21.93	22.38	23.80
	12H	12.79	13.20	13.86	14.27	15.69	20.96	21.36	22.03	22.44	23.86
8H	4H	14.28	14.73	15.33	15.79	17.21	20.25	20.70	21.31	21.76	23.18
	6H	14.52	14.89	15.60	15.99	17.41	20.87	21.24	21.95	22.34	23.76
	8H	14.54	14.87	15.63	15.95	17.39	21.08	21.41	22.17	22.49	23.93
	12H	14.51	14.80	15.60	15.88	17.35	21.22	21.50	22.31	22.58	24.06
12H	4H	14.42	14.83	15.49	15.90	17.32	20.21	20.61	21.28	21.68	23.11
	6H	14.78	15.10	15.86	16.19	17.62	20.85	21.18	21.94	22.26	23.70
	8H	14.85	15.13	15.94	16.21	17.69	21.08	21.36	22.16	22.44	23.92