

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: P937618

Luminaire Tested: SQ4-FB-100U-100D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937618
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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

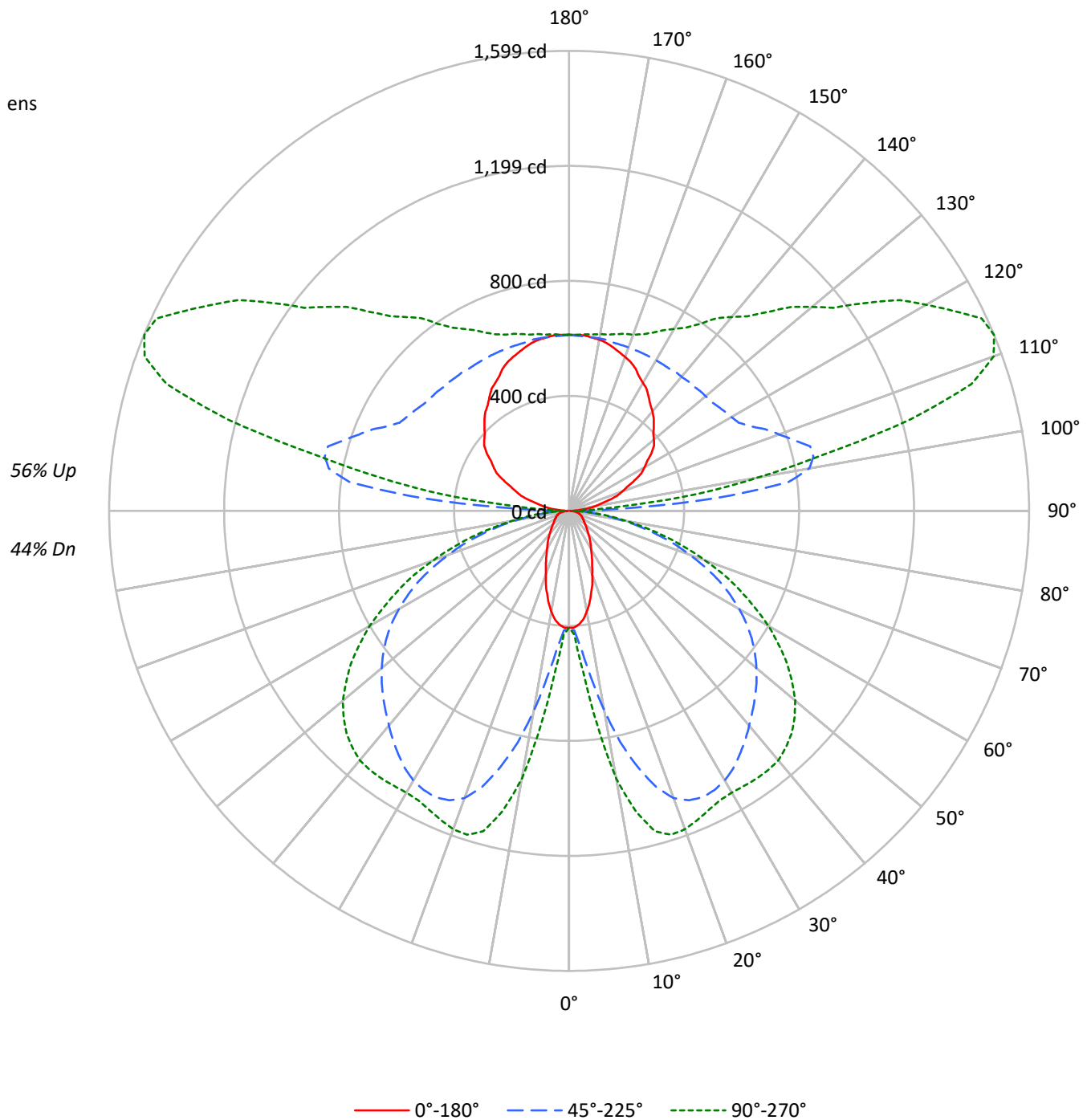
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7112.6 lumens
Efficiency: N/A
Efficacy: 122.6 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: General Diffuse

Input Watts (W): 58
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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3767	3767	3767
5°	3677	4351	5064
10°	3331	6338	8395
15°	2827	8275	10137
20°	2299	9582	10331
25°	1916	10019	10122
30°	1613	10075	10103
35°	1424	9899	10364
40°	1239	9674	10634
45°	1119	9506	10675
50°	1025	9354	10498
55°	978	9134	10033
60°	998	8721	9299
65°	1034	8099	8288
70°	1094	7049	7002
75°	1200	5734	5465
80°	1282	3962	3681
85°	1076	2090	1883

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10675 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	0.7
10°-20°	232.8	3.3
20°-30°	407.1	5.7
30°-40°	524.1	7.4
40°-50°	585.4	8.2
50°-60°	560.7	7.9
60°-70°	444.4	6.2
70°-80°	261.3	3.7
80°-90°	74.9	1.1
90°-100°	298.5	4.2
100°-110°	784.7	11.0
110°-120°	813.7	11.4
120°-130°	652.6	9.2
130°-140°	512.1	7.2
140°-150°	393.1	5.5
150°-160°	283.1	4.0
160°-170°	173.2	2.4
170°-180°	58.5	0.8
0°-30°	692.4	9.7
0°-40°	1216.5	17.1
0°-60°	2362.6	33.2
0°-90°	3143.2	44.2
90°-120°	1896.8	26.7
90°-150°	3454.6	48.6
90°-180°	3969.0	55.8
0°-180°	7112.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	396	424	478	540	560	37
15°	296	547	922	1118	1153	82
25°	189	620	1098	1146	1148	87
35°	128	593	1034	1093	1136	80
45°	87	473	914	1047	1094	68
55°	63	300	776	901	926	57
65°	50	159	576	648	657	49
75°	37	98	316	347	349	38
85°	13	30	78	86	87	14
90°	4	12	31	16	16	4
95°	39	154	514	265	180	44
105°	141	214	868	1317	1229	150
115°	251	305	695	1386	1582	248
125°	349	392	632	1068	1260	310
135°	416	458	612	862	978	322
145°	483	514	605	736	793	303
155°	546	561	605	664	683	251
165°	589	597	605	628	636	166
175°	612	612	609	616	616	58
180°	612	612	612	612	612	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0
2.5°	406.0	406.0	408.6	409.9	412.5	413.9	416.4	419.0	426.9	428.2	430.8
5°	395.6	400.8	417.7	424.2	442.5	467.3	477.8	494.8	530.1	540.4	547.0
7.5°	379.9	391.6	433.4	443.9	489.6	554.9	582.2	618.8	674.9	702.4	724.5
10°	355.1	379.9	454.3	479.1	553.5	652.8	703.7	754.5	839.4	877.2	891.7
12.5°	327.7	368.1	476.5	510.4	617.5	762.4	823.8	879.9	976.5	1027.4	1035.2
15°	296.3	351.1	497.4	547.0	685.4	853.8	921.7	990.9	1081.0	1117.5	1126.6
17.5°	268.9	338.1	516.9	569.2	737.6	936.0	1005.2	1062.7	1135.8	1160.6	1167.1
20°	234.9	317.2	530.1	597.9	792.5	996.1	1062.7	1107.1	1156.7	1172.4	1174.9
22.5°	210.1	295.0	537.9	608.3	828.9	1032.7	1088.8	1124.0	1157.9	1163.2	1164.5
25°	189.3	270.2	536.6	620.1	860.4	1054.8	1097.9	1124.0	1143.6	1146.2	1146.2
27.5°	169.7	242.9	531.3	622.7	883.8	1060.0	1094.0	1112.3	1121.4	1126.6	1126.6
30°	152.7	216.7	518.3	617.5	894.2	1054.8	1082.3	1091.3	1100.5	1108.3	1112.3
32.5°	139.7	191.9	498.7	607.0	895.5	1041.7	1061.3	1066.5	1079.6	1097.9	1104.5
35°	127.9	167.1	476.5	592.7	887.7	1020.9	1033.9	1039.2	1065.3	1092.7	1101.8
37.5°	116.2	148.8	447.8	567.9	876.0	996.1	1005.2	1014.4	1054.8	1087.5	1097.9
40°	104.4	133.2	413.9	540.4	857.7	966.1	973.9	988.3	1041.7	1079.6	1090.1
42.5°	95.3	120.1	377.3	511.8	834.2	932.1	943.8	964.8	1026.1	1066.5	1078.3
45°	87.4	107.0	338.1	472.6	804.1	896.9	913.8	942.6	1007.9	1047.0	1057.5
47.5°	79.6	97.9	297.7	432.2	771.5	861.6	883.8	916.5	983.1	1020.9	1030.0
50°	73.1	88.8	257.2	389.1	736.3	823.8	849.9	883.8	951.7	986.9	998.7
52.5°	67.9	80.9	219.3	346.0	695.8	784.6	814.6	849.9	913.8	947.8	955.6
55°	62.6	74.4	186.7	300.3	654.1	742.8	775.5	809.4	872.1	900.8	906.0
57.5°	60.1	69.2	159.3	257.2	609.7	695.8	732.4	763.7	822.4	844.6	849.9
60°	56.1	65.3	138.4	220.6	561.4	651.4	682.8	714.1	763.7	782.0	785.9
62.5°	52.3	62.6	122.7	185.3	511.8	599.2	630.5	659.3	701.1	714.1	719.4
65°	49.6	60.1	111.0	159.3	460.8	544.4	575.7	600.5	634.5	647.5	650.1
67.5°	47.0	57.4	101.9	137.0	409.9	489.6	513.1	536.6	562.7	575.7	577.0
70°	43.1	54.8	94.0	121.4	357.7	426.9	446.5	471.3	492.1	498.7	502.6
72.5°	40.5	50.9	88.8	109.7	304.2	366.8	385.1	399.4	417.7	424.2	424.2
75°	36.6	45.6	83.6	97.9	249.4	300.3	316.0	330.3	344.6	347.3	343.3
77.5°	32.6	40.5	71.8	82.2	194.5	237.6	250.7	258.5	270.2	272.9	274.2
80°	27.4	35.3	56.1	63.9	141.0	175.0	184.1	190.6	201.1	201.1	203.6
82.5°	20.8	27.4	40.5	45.6	95.3	120.1	127.9	131.9	138.4	138.4	138.4
85°	13.0	17.0	26.1	30.0	57.4	73.1	78.3	79.6	84.9	86.2	86.2
87.5°	6.5	9.1	17.0	18.3	30.0	37.8	37.8	40.5	40.5	39.1	37.8
90°	4.1	7.4	10.7	11.5	18.1	26.9	31.2	27.8	20.8	15.6	15.6
92.5°	16.4	44.4	72.3	79.3	111.5	154.4	175.9	154.1	110.7	78.1	75.0
95°	39.4	90.6	141.8	154.5	274.4	434.1	514.1	458.7	348.1	265.1	255.7
97.5°	68.2	113.3	158.5	169.7	369.6	636.1	769.3	734.3	664.3	611.9	594.0
100°	90.4	131.3	172.2	182.5	404.3	700.0	847.8	850.4	855.4	859.3	837.9
102.5°	109.3	147.5	185.6	195.2	420.2	720.1	870.0	914.6	1003.7	1070.5	1052.2
105°	141.4	173.7	206.0	214.1	432.0	722.3	867.6	967.4	1167.2	1317.1	1307.3
107.5°	174.3	204.4	234.6	242.1	434.1	690.1	818.2	957.6	1236.3	1445.3	1447.7
110°	196.4	223.7	250.9	257.7	430.8	661.7	777.1	932.9	1244.5	1478.1	1488.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	218.2	244.1	270.0	276.5	431.0	636.8	739.7	899.2	1218.0	1457.2	1472.9
115°	251.1	275.0	298.9	304.9	434.9	608.3	695.0	848.6	1155.8	1386.2	1407.9
117.5°	283.6	305.3	327.0	332.5	443.0	590.4	664.1	802.8	1080.0	1288.0	1312.1
120°	302.4	322.9	343.3	348.5	449.5	584.4	651.8	778.4	1031.8	1221.8	1245.3
122.5°	321.0	341.7	362.3	367.4	459.0	581.2	642.3	756.3	984.4	1155.6	1178.7
125°	349.4	368.1	386.9	391.6	471.8	578.6	632.0	728.9	922.7	1068.0	1089.4
127.5°	372.3	391.2	410.3	415.1	484.5	577.1	623.4	706.6	873.0	997.8	1015.8
130°	384.6	405.1	425.5	430.7	493.8	578.1	620.2	694.3	842.4	953.4	970.0
132.5°	397.4	417.8	438.3	443.4	501.3	578.6	617.2	683.5	816.1	915.6	930.5
135°	416.3	434.9	453.6	458.2	509.6	578.1	612.4	667.9	778.8	862.1	875.0
137.5°	435.6	454.1	472.5	477.1	521.9	581.6	611.5	658.4	752.3	822.7	833.2
140°	451.6	468.6	485.6	489.9	529.5	582.2	608.6	649.1	730.2	791.1	800.9
142.5°	464.0	479.7	495.4	499.3	535.8	584.3	608.6	644.2	715.4	768.9	777.4
145°	482.8	496.6	510.2	513.7	544.0	584.4	604.6	633.7	691.9	735.6	742.0
147.5°	501.8	515.1	528.4	531.7	556.0	588.4	604.6	627.5	673.3	707.7	713.0
150°	514.1	526.1	538.2	541.2	562.4	590.5	604.6	623.9	662.6	691.6	695.8
152.5°	526.8	535.9	545.1	547.4	566.4	591.8	604.6	621.1	654.1	678.9	682.1
155°	545.8	552.5	559.3	561.0	575.5	594.9	604.6	617.7	644.0	663.6	665.8
157.5°	559.7	566.3	572.8	574.5	584.5	597.8	604.6	614.7	635.2	650.5	652.0
160°	569.2	574.3	579.4	580.6	588.7	599.2	604.6	613.4	630.8	644.0	644.9
162.5°	578.6	582.4	586.3	587.3	593.0	600.7	604.6	612.0	626.7	637.8	638.5
165°	588.8	592.3	595.8	596.7	599.3	602.8	604.6	609.9	620.5	628.4	629.3
167.5°	598.3	600.0	601.7	602.1	604.3	607.1	608.6	612.1	619.0	624.2	624.6
170°	604.6	606.1	607.8	608.2	608.3	608.5	608.6	612.1	619.0	624.2	624.2
172.5°	607.8	608.2	608.5	608.6	608.6	608.6	608.6	611.4	616.8	621.0	620.7
175°	612.4	612.4	612.4	612.4	611.1	609.4	608.6	610.4	613.8	616.4	616.4
177.5°	612.4	612.4	612.4	612.4	611.4	610.1	609.4	610.8	613.5	615.6	615.2
180°	612.4	612.4	612.4	612.4	612.4	612.4	612.4	612.4	612.4	612.4	612.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	406.0	406.0
2.5°	433.4	430.8
5°	557.4	560.1
7.5°	750.7	749.3
10°	933.5	945.1
12.5°	1066.5	1069.2
15°	1147.6	1152.7
17.5°	1178.9	1180.2
20°	1180.2	1177.5
22.5°	1165.8	1163.2
25°	1148.8	1147.6
27.5°	1133.1	1134.4
30°	1126.6	1130.6
32.5°	1126.6	1133.1
35°	1129.3	1135.8
37.5°	1127.9	1135.8
40°	1122.8	1131.9
42.5°	1108.3	1114.9
45°	1086.2	1094.0
47.5°	1057.5	1062.7
50°	1020.9	1026.1
52.5°	975.2	976.5
55°	920.3	925.6
57.5°	861.6	862.9
60°	796.3	800.3
62.5°	727.2	727.2
65°	654.1	656.6
67.5°	578.4	584.9
70°	501.3	502.6
72.5°	425.6	425.6
75°	347.3	348.6
77.5°	272.9	272.9
80°	202.3	203.6
82.5°	139.7	142.3
85°	87.4	87.4
87.5°	40.5	36.6
90°	15.6	15.6
92.5°	62.5	50.1
95°	218.1	180.4
97.5°	522.4	450.8
100°	752.7	667.4
102.5°	979.2	906.2
105°	1268.0	1228.8
107.5°	1457.2	1466.7
110°	1529.3	1570.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1535.7	1598.6
115°	1495.0	1582.2
117.5°	1408.7	1505.3
120°	1339.1	1433.0
122.5°	1271.4	1363.9
125°	1174.6	1260.0
127.5°	1087.8	1159.7
130°	1036.5	1103.0
132.5°	990.0	1049.6
135°	926.2	977.6
137.5°	875.3	917.3
140°	840.2	879.4
142.5°	811.1	844.9
145°	767.6	793.2
147.5°	734.2	755.3
150°	713.0	730.2
152.5°	695.1	708.1
155°	674.4	683.0
157.5°	658.1	664.1
160°	648.3	651.8
162.5°	641.9	645.2
165°	632.7	636.2
167.5°	626.0	627.5
170°	624.2	624.2
172.5°	619.4	618.1
175°	616.4	616.4
177.5°	613.8	612.4
180°	612.4	612.4



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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	5.05	5.89	6.04	6.90	8.25	18.18	19.03	19.18	20.04	21.39
	3H	5.75	6.51	6.76	7.53	8.90	20.01	20.76	21.01	21.79	23.16
	4H	6.05	6.77	7.07	7.79	9.17	20.64	21.36	21.66	22.39	23.76
	6H	6.30	6.96	7.33	7.99	9.38	21.06	21.72	22.09	22.75	24.14
	8H	6.36	7.00	7.40	8.04	9.43	21.17	21.80	22.21	22.85	24.24
	12H	6.38	6.98	7.42	8.02	9.43	21.23	21.83	22.28	22.87	24.28
4H	2H	12.23	12.95	13.26	13.98	15.36	18.46	19.18	19.48	20.20	21.58
	3H	13.80	14.40	14.84	15.46	16.85	20.49	21.09	21.52	22.14	23.53
	4H	13.90	14.45	14.94	15.49	16.91	21.24	21.79	22.29	22.84	24.25
	6H	13.91	14.38	14.96	15.45	16.86	21.77	22.24	22.82	23.31	24.72
	8H	13.88	14.33	14.94	15.39	16.81	21.92	22.37	22.98	23.43	24.85
	12H	13.84	14.24	14.91	15.32	16.75	22.01	22.41	23.08	23.49	24.92
8H	4H	15.33	15.77	16.38	16.84	18.26	21.30	21.75	22.36	22.81	24.23
	6H	15.57	15.94	16.65	17.04	18.46	21.92	22.29	23.00	23.39	24.81
	8H	15.59	15.91	16.67	17.00	18.44	22.13	22.45	23.22	23.54	24.98
	12H	15.56	15.84	16.65	16.92	18.40	22.27	22.55	23.36	23.63	25.11
12H	4H	15.47	15.87	16.54	16.95	18.38	21.25	21.66	22.33	22.73	24.16
	6H	15.83	16.15	16.91	17.24	18.68	21.90	22.23	22.99	23.31	24.75
	8H	15.89	16.18	16.98	17.26	18.74	22.12	22.41	23.21	23.49	24.97