

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: P936473

Luminaire Tested: SQ4-FB-025U-100D-940-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936473
REPORT IS A COMBINATION OF REPORTS P933431 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

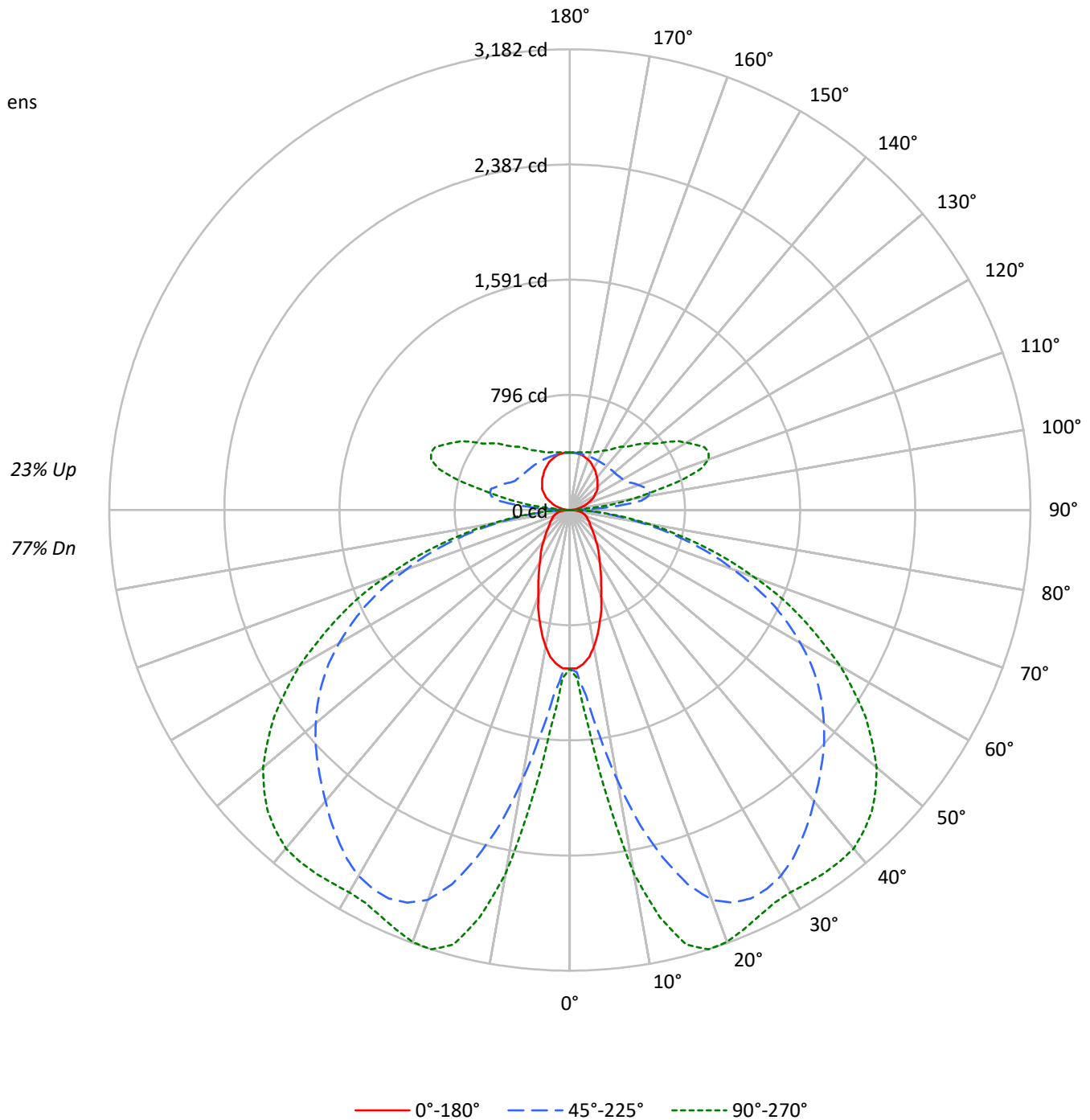
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11046.7 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 116.4
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				
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66				63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55				51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45				42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38				35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33				30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28				26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25				22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22				20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19				17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3386	3386	3386
5°	3309	3914	4551
10°	3003	5707	7545
15°	2553	7458	9110
20°	2079	8645	9285
25°	1735	9049	9096
30°	1464	9108	9079
35°	1295	8959	9314
40°	1129	8765	9556
45°	1023	8624	9594
50°	939	8497	9435
55°	901	8310	9017
60°	923	7949	8356
65°	961	7398	7449
70°	1027	6457	6293
75°	1143	5269	4911
80°	1257	3659	3309
85°	1141	1945	1694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9594 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	1.3
10°-20°	627.5	5.7
20°-30°	1097.7	9.9
30°-40°	1413.0	12.8
40°-50°	1578.3	14.3
50°-60°	1511.7	13.7
60°-70°	1198.0	10.8
70°-80°	704.5	6.4
80°-90°	197.2	1.8
90°-100°	193.8	1.8
100°-110°	509.5	4.6
110°-120°	528.3	4.8
120°-130°	423.7	3.8
130°-140°	332.5	3.0
140°-150°	255.2	2.3
150°-160°	183.8	1.7
160°-170°	112.5	1.0
170°-180°	38.0	0.3
0°-30°	1866.8	16.9
0°-40°	3279.9	29.7
0°-60°	6369.8	57.7
0°-90°	8469.5	76.7
90°-120°	1231.6	11.1
90°-150°	2243.0	20.3
90°-180°	2577.0	23.3
0°-180°	11046.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1066	1144	1288	1457	1510	98
15°	799	1475	2485	3013	3108	222
25°	510	1672	2960	3090	3094	235
35°	345	1598	2788	2946	3062	215
45°	236	1274	2464	2823	2950	182
55°	169	810	2091	2429	2496	154
65°	134	429	1552	1746	1770	133
75°	99	264	852	936	940	103
85°	35	81	211	232	236	37
90°	3	8	20	10	10	5
95°	26	100	334	172	117	28
105°	92	139	563	855	798	97
115°	163	198	451	900	1027	161
125°	227	254	410	693	818	201
135°	270	298	398	560	635	209
145°	314	334	392	478	515	196
155°	354	364	392	431	444	163
165°	382	387	392	408	413	108
175°	398	398	395	400	400	38
180°	398	398	398	398	398	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1094.6	1094.6	1094.6	1094.6	1094.6	1094.6	1094.6	1094.6	1094.6	1094.6	1094.6
2.5°	1094.6	1094.6	1101.7	1105.2	1112.2	1115.8	1122.8	1129.8	1150.9	1154.5	1161.5
5°	1066.5	1080.5	1126.3	1143.9	1193.2	1260.1	1288.2	1334.0	1429.0	1457.1	1474.7
7.5°	1024.2	1055.9	1168.5	1196.7	1319.8	1495.8	1569.8	1668.3	1819.7	1893.6	1953.4
10°	957.4	1024.2	1224.8	1291.7	1492.4	1759.8	1897.1	2034.4	2263.2	2365.2	2403.9
12.5°	883.5	992.5	1284.7	1376.2	1664.8	2055.5	2220.9	2372.3	2632.7	2770.0	2791.1
15°	798.9	946.8	1341.0	1474.7	1847.8	2301.9	2484.9	2671.5	2914.3	3012.8	3037.5
17.5°	725.1	911.6	1393.8	1534.6	1988.6	2523.6	2710.2	2865.0	3062.1	3129.0	3146.6
20°	633.5	855.3	1429.0	1612.0	2136.4	2685.5	2865.0	2984.7	3118.4	3160.7	3167.7
22.5°	566.6	795.5	1450.1	1640.1	2235.0	2784.1	2935.4	3030.5	3121.9	3136.1	3139.5
25°	510.3	728.6	1446.6	1671.8	2319.5	2843.9	2960.1	3030.5	3083.2	3090.2	3090.2
27.5°	457.6	654.6	1432.5	1678.9	2382.9	2857.9	2949.5	2998.8	3023.4	3037.5	3037.5
30°	411.8	584.3	1397.3	1664.8	2411.0	2843.9	2917.8	2942.5	2967.1	2988.2	2998.8
32.5°	376.6	517.3	1344.5	1636.7	2414.5	2808.7	2861.5	2875.6	2910.8	2960.1	2977.6
35°	344.9	450.5	1284.7	1598.0	2393.3	2752.4	2787.6	2801.6	2872.1	2945.9	2970.6
37.5°	313.3	401.3	1207.2	1531.1	2361.7	2685.5	2710.2	2734.8	2843.9	2931.9	2960.1
40°	281.6	359.0	1115.8	1457.1	2312.4	2604.6	2625.6	2664.4	2808.7	2910.8	2938.9
42.5°	256.9	323.9	1017.2	1379.7	2249.0	2513.0	2544.7	2601.0	2766.5	2875.6	2907.2
45°	235.9	288.6	911.6	1274.1	2168.1	2418.0	2463.8	2541.2	2717.2	2822.8	2850.9
47.5°	214.7	264.0	802.5	1165.1	2080.1	2323.0	2382.9	2470.8	2650.3	2752.4	2777.0
50°	197.1	239.3	693.4	1048.9	1985.1	2220.9	2291.3	2382.9	2565.9	2660.9	2692.6
52.5°	183.0	218.2	591.3	932.8	1876.0	2115.3	2196.3	2291.3	2463.8	2555.3	2576.4
55°	169.0	200.6	503.3	809.5	1763.4	2002.7	2090.7	2182.2	2351.2	2428.6	2442.6
57.5°	161.9	186.6	429.4	693.4	1643.7	1876.0	1974.6	2059.0	2217.4	2277.2	2291.3
60°	151.3	176.0	373.0	594.8	1513.4	1756.3	1840.8	1925.3	2059.0	2108.3	2118.9
62.5°	140.7	169.0	330.9	499.8	1379.7	1615.5	1700.0	1777.4	1890.1	1925.3	1939.3
65°	133.7	161.9	299.2	429.4	1242.5	1467.7	1552.1	1619.1	1710.6	1745.7	1752.8
67.5°	126.7	154.9	274.6	369.6	1105.2	1319.8	1383.2	1446.6	1517.0	1552.1	1555.7
70°	116.2	147.9	253.4	327.3	964.4	1150.9	1203.8	1270.6	1326.9	1344.5	1355.1
72.5°	109.1	137.3	239.3	295.6	820.1	989.1	1038.3	1077.1	1126.3	1143.9	1143.9
75°	98.6	123.2	225.3	264.0	672.2	809.5	851.8	890.5	929.2	936.2	925.7
77.5°	88.0	109.1	193.6	221.7	524.5	640.6	675.8	696.9	728.6	735.6	739.2
80°	73.9	95.0	151.3	172.4	380.2	471.6	496.3	513.9	542.0	542.0	549.1
82.5°	56.3	73.9	109.1	123.2	256.9	323.9	344.9	355.5	373.0	373.0	373.0
85°	35.2	45.7	70.4	81.0	154.9	197.1	211.2	214.7	228.7	232.3	232.3
87.5°	17.6	24.6	45.7	49.3	81.0	102.0	102.0	109.1	109.1	105.6	102.0
90°	2.7	4.8	6.9	7.5	11.7	17.4	20.2	18.0	13.5	10.1	10.1
92.5°	10.7	28.8	47.0	51.5	72.4	100.3	114.2	100.1	71.8	50.7	48.7
95°	25.6	58.8	92.0	100.3	178.1	281.9	333.8	297.8	226.0	172.1	166.0
97.5°	44.3	73.6	102.9	110.2	239.9	413.0	499.5	476.8	431.4	397.3	385.7
100°	58.7	85.2	111.8	118.5	262.5	454.5	550.5	552.2	555.4	557.9	544.1
102.5°	71.0	95.7	120.5	126.7	272.8	467.5	564.9	593.8	651.6	695.0	683.1
105°	91.8	112.8	133.7	139.0	280.4	469.0	563.3	628.1	757.8	855.1	848.8
107.5°	113.1	132.7	152.3	157.2	281.9	448.1	531.2	621.7	802.7	938.4	939.9
110°	127.5	145.2	162.9	167.3	279.7	429.6	504.6	605.7	808.0	959.8	966.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	141.7	158.5	175.4	179.6	279.8	413.5	480.3	583.9	790.9	946.2	956.4
115°	163.0	178.6	194.1	198.0	282.4	394.9	451.2	550.9	750.4	900.0	914.1
117.5°	184.1	198.2	212.3	215.9	287.6	383.3	431.2	521.3	701.3	836.2	851.9
120°	196.3	209.7	223.0	226.3	291.9	379.4	423.1	505.4	669.9	793.3	808.5
122.5°	208.4	221.8	235.1	238.5	298.0	377.3	417.0	491.1	639.2	750.3	765.3
125°	226.8	239.0	251.3	254.3	306.4	375.7	410.3	473.2	599.0	693.4	707.3
127.5°	241.7	254.1	266.4	269.5	314.6	374.7	404.8	458.7	566.8	647.8	659.5
130°	249.7	263.0	276.3	279.6	320.7	375.3	402.6	450.7	546.9	619.0	629.9
132.5°	258.1	271.3	284.6	287.9	325.5	375.7	400.8	443.8	530.0	594.5	604.2
135°	270.3	282.4	294.5	297.5	330.9	375.4	397.6	433.6	505.7	559.8	568.1
137.5°	282.8	294.8	306.7	309.7	338.9	377.7	397.0	427.5	488.4	534.1	541.0
140°	293.2	304.2	315.3	318.1	343.7	378.0	395.2	421.4	474.1	513.6	520.0
142.5°	301.2	311.4	321.6	324.2	347.8	379.4	395.2	418.2	464.5	499.2	504.7
145°	313.6	322.4	331.3	333.5	353.2	379.4	392.5	411.4	449.2	477.6	481.7
147.5°	325.8	334.4	343.1	345.3	361.0	382.0	392.5	407.4	437.2	459.5	462.9
150°	333.8	341.6	349.4	351.4	365.1	383.3	392.5	405.1	430.2	449.1	451.8
152.5°	342.1	348.0	353.9	355.4	367.7	384.2	392.5	403.2	424.7	440.8	442.9
155°	354.3	358.7	363.1	364.2	373.6	386.2	392.5	401.0	418.2	430.9	432.4
157.5°	363.4	367.6	372.0	373.0	379.5	388.1	392.5	399.2	412.4	422.3	423.3
160°	369.6	372.9	376.2	377.0	382.2	389.0	392.5	398.2	409.5	418.1	418.6
162.5°	375.7	378.2	380.7	381.3	385.0	390.0	392.5	397.3	406.9	414.1	414.6
165°	382.4	384.6	386.9	387.4	389.1	391.3	392.5	396.0	402.8	407.9	408.5
167.5°	388.5	389.6	390.6	390.9	392.3	394.2	395.2	397.4	401.9	405.3	405.5
170°	392.5	393.6	394.6	394.9	395.0	395.1	395.2	397.4	401.9	405.3	405.3
172.5°	394.6	394.9	395.1	395.2	395.2	395.2	395.2	396.9	400.5	403.2	403.0
175°	397.6	397.6	397.6	397.6	396.8	395.7	395.2	396.3	398.5	400.2	400.2
177.5°	397.6	397.6	397.6	397.6	396.9	396.1	395.7	396.6	398.4	399.7	399.4
180°	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6	397.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1094.6	1094.6
2.5°	1168.5	1161.5
5°	1502.9	1510.0
7.5°	2023.8	2020.3
10°	2516.6	2548.2
12.5°	2875.6	2882.6
15°	3093.8	3107.9
17.5°	3178.2	3181.8
20°	3181.8	3174.8
22.5°	3143.1	3136.1
25°	3097.3	3093.8
27.5°	3055.1	3058.6
30°	3037.5	3048.1
32.5°	3037.5	3055.1
35°	3044.5	3062.1
37.5°	3041.0	3062.1
40°	3026.9	3051.5
42.5°	2988.2	3005.8
45°	2928.4	2949.5
47.5°	2850.9	2865.0
50°	2752.4	2766.5
52.5°	2629.2	2632.7
55°	2481.3	2495.5
57.5°	2323.0	2326.5
60°	2147.0	2157.6
62.5°	1960.4	1960.4
65°	1763.4	1770.4
67.5°	1559.2	1576.8
70°	1351.5	1355.1
72.5°	1147.4	1147.4
75°	936.2	939.8
77.5°	735.6	735.6
80°	545.6	549.1
82.5°	376.6	383.6
85°	235.9	235.9
87.5°	109.1	98.6
90°	10.1	10.1
92.5°	40.7	32.6
95°	141.5	117.1
97.5°	339.2	292.7
100°	488.8	433.3
102.5°	635.7	588.3
105°	823.3	797.8
107.5°	946.2	952.3
110°	993.0	1019.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	997.1	1037.9
115°	970.7	1027.2
117.5°	914.6	977.3
120°	869.4	930.4
122.5°	825.5	885.6
125°	762.6	818.0
127.5°	706.2	752.9
130°	673.0	716.2
132.5°	642.8	681.5
135°	601.4	634.7
137.5°	568.2	595.6
140°	545.5	571.0
142.5°	526.7	548.6
145°	498.3	515.0
147.5°	476.7	490.4
150°	463.0	474.1
152.5°	451.3	459.7
155°	437.9	443.5
157.5°	427.3	431.2
160°	420.9	423.1
162.5°	416.7	418.9
165°	410.8	413.0
167.5°	406.4	407.4
170°	405.3	405.3
172.5°	402.1	401.3
175°	400.2	400.2
177.5°	398.5	397.6
180°	397.6	397.6



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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	7.38	8.61	8.06	9.32	10.15	20.57	21.80	21.25	22.51	23.34
	3H	8.11	9.23	8.80	9.94	10.80	22.44	23.56	23.13	24.27	25.13
	4H	8.42	9.48	9.14	10.20	11.08	23.11	24.16	23.82	24.89	25.76
	6H	8.69	9.67	9.42	10.41	11.29	23.56	24.54	24.29	25.27	26.16
	8H	8.77	9.70	9.51	10.46	11.35	23.69	24.63	24.43	25.38	26.27
	12H	8.80	9.69	9.55	10.44	11.36	23.78	24.67	24.52	25.42	26.34
4H	2H	14.64	15.70	15.36	16.42	17.30	20.89	21.94	21.60	22.67	23.54
	3H	16.24	17.13	16.97	17.89	18.78	22.97	23.86	23.70	24.62	25.51
	4H	16.36	17.16	17.10	17.93	18.85	23.76	24.56	24.50	25.33	26.25
	6H	16.39	17.09	17.15	17.88	18.81	24.32	25.03	25.09	25.81	26.74
	8H	16.38	17.03	17.14	17.82	18.76	24.50	25.15	25.27	25.94	26.88
	12H	16.35	16.94	17.14	17.75	18.70	24.61	25.21	25.40	26.01	26.96
8H	4H	17.84	18.49	18.60	19.28	20.22	23.85	24.51	24.62	25.29	26.23
	6H	18.10	18.64	18.89	19.47	20.41	24.50	25.05	25.30	25.87	26.82
	8H	18.12	18.61	18.93	19.43	20.39	24.73	25.22	25.54	26.04	27.00
	12H	18.11	18.54	18.92	19.35	20.37	24.89	25.32	25.71	26.14	27.16
12H	4H	18.00	18.59	18.79	19.40	20.35	23.82	24.41	24.61	25.22	26.17
	6H	18.36	18.85	19.17	19.67	20.63	24.49	24.98	25.30	25.80	26.76
	8H	18.45	18.88	19.26	19.69	20.71	24.74	25.17	25.55	25.99	27.00