

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: P936426

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936426
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-92765-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

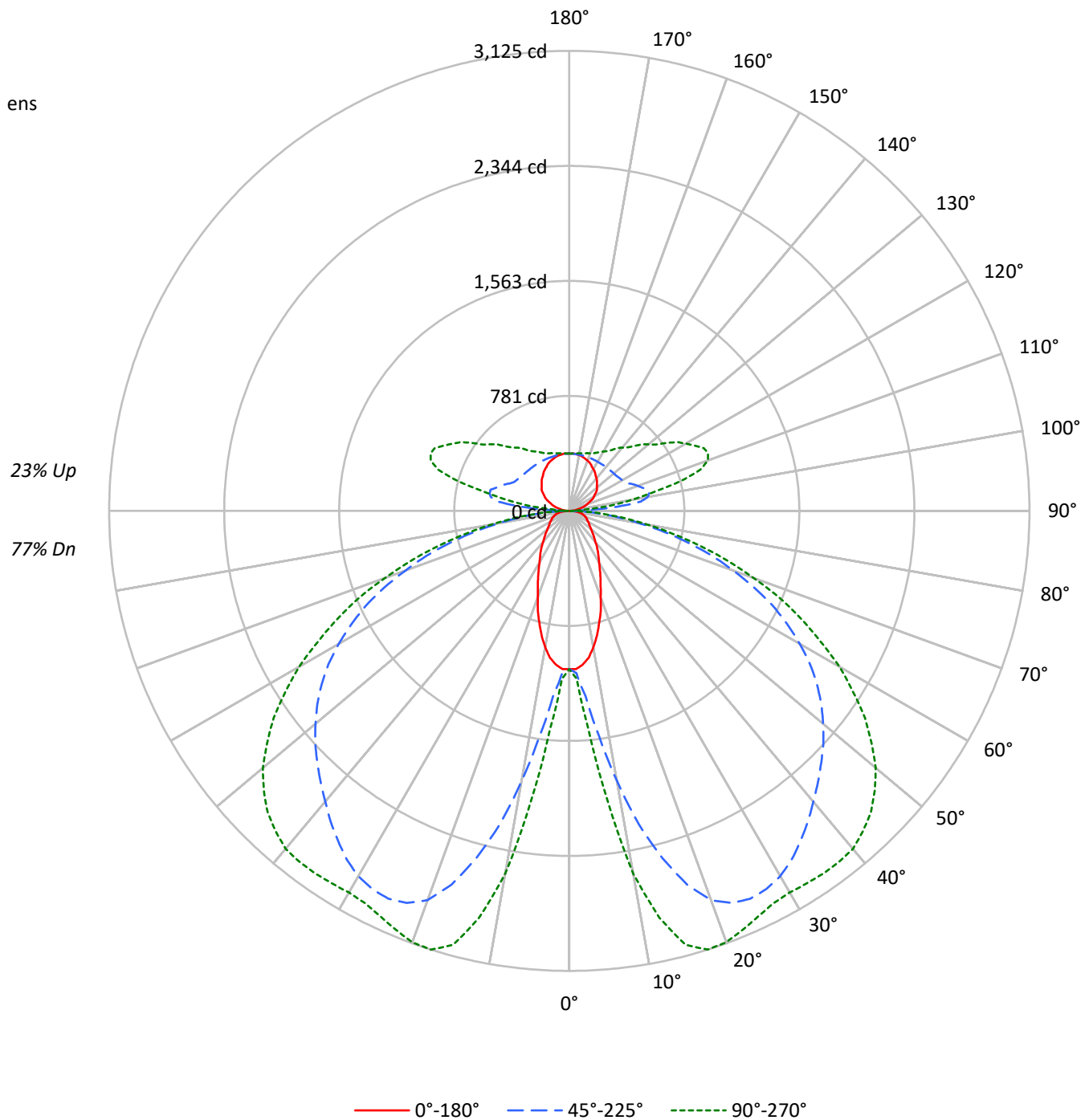
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10848.1 lumens
Efficiency: N/A
Efficacy: 93.2 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				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				63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51				51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42				42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35				35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30				30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26				26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22				22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20				20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17				17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3325	3325	3325
5°	3249	3844	4469
10°	2948	5605	7409
15°	2507	7324	8946
20°	2042	8489	9118
25°	1704	8886	8933
30°	1437	8944	8916
35°	1271	8798	9146
40°	1109	8607	9385
45°	1005	8469	9421
50°	922	8344	9265
55°	884	8161	8855
60°	906	7806	8206
65°	944	7265	7315
70°	1009	6340	6180
75°	1122	5174	4823
80°	1235	3593	3250
85°	1118	1910	1663

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	1.3
10°-20°	616.3	5.7
20°-30°	1077.9	9.9
30°-40°	1387.6	12.8
40°-50°	1549.9	14.3
50°-60°	1484.5	13.7
60°-70°	1176.4	10.8
70°-80°	691.8	6.4
80°-90°	193.7	1.8
90°-100°	190.3	1.8
100°-110°	500.3	4.6
110°-120°	518.8	4.8
120°-130°	416.1	3.8
130°-140°	326.5	3.0
140°-150°	250.6	2.3
150°-160°	180.5	1.7
160°-170°	110.4	1.0
170°-180°	37.3	0.3
0°-30°	1833.3	16.9
0°-40°	3220.9	29.7
0°-60°	6255.3	57.7
0°-90°	8317.2	76.7
90°-120°	1209.4	11.1
90°-150°	2202.7	20.3
90°-180°	2531.0	23.3
0°-180°	10848.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1047	1123	1265	1431	1483	97
15°	785	1448	2440	2959	3052	218
25°	501	1642	2907	3035	3038	231
35°	339	1569	2738	2893	3007	212
45°	232	1251	2420	2772	2896	179
55°	166	795	2053	2385	2451	151
65°	131	422	1524	1714	1739	130
75°	97	259	836	919	923	101
85°	34	80	207	228	232	37
90°	3	7	20	10	10	5
95°	25	98	328	169	115	28
105°	90	136	553	840	783	96
115°	160	194	443	884	1009	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	328	385	469	506	193
155°	348	358	385	423	436	160
165°	376	380	385	401	406	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0	1075.0
2.5°	1075.0	1075.0	1081.8	1085.3	1092.2	1095.7	1102.6	1109.5	1130.2	1133.7	1140.6
5°	1047.3	1061.1	1106.1	1123.4	1171.8	1237.4	1265.1	1310.0	1403.3	1430.9	1448.2
7.5°	1005.8	1036.9	1147.5	1175.2	1296.1	1468.9	1541.6	1638.3	1787.0	1859.5	1918.3
10°	940.1	1005.8	1202.8	1268.5	1465.5	1728.2	1863.0	1997.8	2222.5	2322.7	2360.7
12.5°	867.6	974.7	1261.6	1351.5	1634.9	2018.5	2181.0	2329.6	2585.4	2720.2	2740.9
15°	784.6	929.8	1316.9	1448.2	1814.6	2260.5	2440.2	2623.4	2861.9	2958.6	2982.9
17.5°	712.0	895.2	1368.7	1507.0	1952.8	2478.2	2661.4	2813.5	3007.0	3072.7	3090.1
20°	622.1	839.9	1403.3	1583.0	2098.0	2637.2	2813.5	2931.0	3062.3	3103.8	3110.7
22.5°	556.4	781.2	1424.0	1610.6	2194.8	2734.0	2882.6	2976.0	3065.8	3079.7	3083.1
25°	501.2	715.5	1420.5	1641.8	2277.8	2792.8	2906.8	2976.0	3027.8	3034.7	3034.7
27.5°	449.4	642.9	1406.8	1648.7	2340.0	2806.6	2896.5	2944.9	2969.0	2982.9	2982.9
30°	404.4	573.8	1372.1	1634.9	2367.7	2792.8	2865.3	2889.6	2913.7	2934.5	2944.9
32.5°	369.8	508.0	1320.3	1607.2	2371.1	2758.2	2810.0	2823.9	2858.4	2906.8	2924.1
35°	338.7	442.4	1261.6	1569.2	2350.3	2702.9	2737.5	2751.3	2820.4	2893.0	2917.2
37.5°	307.7	394.1	1185.5	1503.6	2319.3	2637.2	2661.4	2685.6	2792.8	2879.2	2906.8
40°	276.5	352.6	1095.7	1430.9	2270.9	2557.8	2578.4	2616.5	2758.2	2858.4	2886.1
42.5°	252.3	318.0	998.9	1354.9	2208.6	2467.9	2499.0	2554.3	2716.7	2823.9	2855.0
45°	231.6	283.4	895.2	1251.2	2129.2	2374.5	2419.5	2495.5	2668.3	2772.0	2799.7
47.5°	210.9	259.3	788.1	1144.1	2042.7	2281.2	2340.0	2426.3	2602.7	2702.9	2727.1
50°	193.6	235.0	680.9	1030.0	1949.4	2181.0	2250.1	2340.0	2519.7	2613.0	2644.2
52.5°	179.7	214.3	580.7	916.0	1842.3	2077.3	2156.8	2250.1	2419.5	2509.4	2530.1
55°	165.9	197.0	494.3	794.9	1731.7	1966.7	2053.1	2142.9	2308.9	2384.9	2398.7
57.5°	159.0	183.2	421.7	680.9	1614.1	1842.3	1939.1	2022.0	2177.6	2236.2	2250.1
60°	148.6	172.8	366.3	584.1	1486.2	1724.7	1807.7	1890.7	2022.0	2070.4	2080.8
62.5°	138.2	165.9	324.9	490.8	1354.9	1586.5	1669.4	1745.5	1856.1	1890.7	1904.4
65°	131.3	159.0	293.8	421.7	1220.1	1441.3	1524.2	1590.0	1679.8	1714.3	1721.3
67.5°	124.4	152.1	269.6	362.9	1085.3	1296.1	1358.4	1420.5	1489.7	1524.2	1527.7
70°	114.1	145.2	248.9	321.4	947.0	1130.2	1182.1	1247.8	1303.1	1320.3	1330.7
72.5°	107.2	134.8	235.0	290.3	805.3	971.3	1019.7	1057.7	1106.1	1123.4	1123.4
75°	96.8	121.0	221.2	259.3	660.1	794.9	836.5	874.5	912.5	919.4	909.0
77.5°	86.4	107.2	190.1	217.7	515.0	629.1	663.6	684.4	715.5	722.4	725.9
80°	72.6	93.3	148.6	169.3	373.3	463.1	487.4	504.6	532.3	532.3	539.2
82.5°	55.3	72.6	107.2	121.0	252.3	318.0	338.7	349.1	366.3	366.3	366.3
85°	34.5	44.9	69.2	79.5	152.1	193.6	207.4	210.9	224.6	228.1	228.1
87.5°	17.3	24.2	44.9	48.4	79.5	100.2	100.2	107.2	107.2	103.7	100.2
90°	2.6	4.7	6.8	7.3	11.5	17.1	19.9	17.7	13.3	9.9	9.9
92.5°	10.5	28.3	46.1	50.6	71.1	98.5	112.1	98.3	70.5	49.8	47.8
95°	25.1	57.7	90.3	98.5	174.9	276.9	327.8	292.5	221.9	169.0	163.0
97.5°	43.5	72.3	101.1	108.2	235.6	405.6	490.5	468.2	423.6	390.1	378.7
100°	57.6	83.7	109.8	116.3	257.8	446.3	540.6	542.2	545.5	547.9	534.3
102.5°	69.7	94.0	118.3	124.4	267.9	459.1	554.7	583.1	639.9	682.5	670.9
105°	90.2	110.7	131.3	136.5	275.4	460.5	553.1	616.8	744.2	839.8	833.5
107.5°	111.1	130.3	149.6	154.4	276.8	440.0	521.7	610.5	788.2	921.6	923.0
110°	125.2	142.6	159.9	164.3	274.7	421.9	495.5	594.8	793.5	942.5	949.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	139.2	155.7	172.2	176.3	274.8	406.0	471.7	573.4	776.6	929.2	939.2
115°	160.1	175.4	190.6	194.5	277.3	387.8	443.1	541.0	736.9	883.8	897.7
117.5°	180.8	194.6	208.5	212.0	282.5	376.5	423.5	511.9	688.6	821.2	836.6
120°	192.8	205.9	219.0	222.2	286.6	372.5	415.5	496.3	657.9	779.0	794.0
122.5°	204.7	217.8	230.9	234.2	292.7	370.5	409.5	482.2	627.7	736.8	751.5
125°	222.7	234.8	246.8	249.8	300.9	369.0	403.0	464.7	588.3	681.0	694.6
127.5°	237.4	249.5	261.6	264.7	309.0	368.0	397.5	450.5	556.6	636.1	647.7
130°	245.2	258.3	271.4	274.6	314.9	368.5	395.4	442.6	537.1	607.9	618.5
132.5°	253.4	266.4	279.5	282.7	319.7	369.0	393.5	435.8	520.4	583.8	593.3
135°	265.4	277.3	289.2	292.1	324.9	368.6	390.4	425.8	496.6	549.7	557.9
137.5°	277.7	289.5	301.2	304.2	332.8	370.9	389.9	419.8	479.6	524.5	531.2
140°	287.9	298.8	309.7	312.4	337.6	371.2	388.1	413.9	465.6	504.4	510.7
142.5°	295.8	305.8	315.9	318.4	341.6	372.5	388.1	410.7	456.2	490.3	495.7
145°	307.9	316.6	325.4	327.5	346.8	372.5	385.4	404.0	441.2	469.0	473.1
147.5°	319.9	328.4	337.0	339.0	354.5	375.1	385.4	400.1	429.3	451.2	454.6
150°	327.8	335.5	343.1	345.1	358.5	376.5	385.4	397.8	422.5	441.0	443.7
152.5°	335.9	341.8	347.5	349.0	361.1	377.3	385.4	396.0	417.1	432.9	435.0
155°	347.9	352.2	356.6	357.6	366.9	379.2	385.4	393.8	410.6	423.2	424.6
157.5°	356.8	361.0	365.3	366.3	372.7	381.2	385.4	392.0	405.0	414.7	415.7
160°	362.9	366.2	369.5	370.3	375.3	382.0	385.4	391.0	402.2	410.6	411.1
162.5°	369.0	371.4	373.8	374.5	378.1	383.0	385.4	390.1	399.6	406.6	407.2
165°	375.5	377.7	379.9	380.5	382.1	384.3	385.4	388.8	395.6	400.6	401.1
167.5°	381.5	382.6	383.6	383.9	385.3	387.1	388.1	390.2	394.7	398.0	398.3
170°	385.4	386.5	387.5	387.8	387.9	388.0	388.1	390.2	394.7	398.0	398.0
172.5°	387.5	387.8	388.0	388.1	388.1	388.1	388.1	389.8	393.3	395.9	395.7
175°	390.4	390.4	390.4	390.4	389.6	388.6	388.1	389.2	391.4	393.0	393.0
177.5°	390.4	390.4	390.4	390.4	389.8	389.0	388.6	389.5	391.2	392.5	392.2
180°	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1075.0	1075.0
2.5°	1147.5	1140.6
5°	1475.9	1482.8
7.5°	1987.5	1984.0
10°	2471.3	2502.4
12.5°	2823.9	2830.8
15°	3038.2	3052.0
17.5°	3121.1	3124.6
20°	3124.6	3117.7
22.5°	3086.6	3079.7
25°	3041.7	3038.2
27.5°	3000.1	3003.6
30°	2982.9	2993.3
32.5°	2982.9	3000.1
35°	2989.8	3007.0
37.5°	2986.3	3007.0
40°	2972.5	2996.7
42.5°	2934.5	2951.7
45°	2875.7	2896.5
47.5°	2799.7	2813.5
50°	2702.9	2716.7
52.5°	2581.9	2585.4
55°	2436.7	2450.6
57.5°	2281.2	2284.6
60°	2108.4	2118.8
62.5°	1925.2	1925.2
65°	1731.7	1738.6
67.5°	1531.2	1548.5
70°	1327.2	1330.7
72.5°	1126.8	1126.8
75°	919.4	922.9
77.5°	722.4	722.4
80°	535.8	539.2
82.5°	369.8	376.7
85°	231.6	231.6
87.5°	107.2	96.8
90°	9.9	9.9
92.5°	39.9	32.0
95°	139.0	115.0
97.5°	333.1	287.4
100°	480.0	425.6
102.5°	624.3	577.7
105°	808.5	783.4
107.5°	929.2	935.2
110°	975.1	1001.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	979.2	1019.2
115°	953.2	1008.8
117.5°	898.2	959.8
120°	853.8	913.6
122.5°	810.6	869.7
125°	748.9	803.3
127.5°	693.5	739.4
130°	660.9	703.3
132.5°	631.3	669.2
135°	590.6	623.3
137.5°	558.0	584.9
140°	535.7	560.7
142.5°	517.2	538.7
145°	489.4	505.7
147.5°	468.1	481.6
150°	454.7	465.6
152.5°	443.2	451.5
155°	430.0	435.5
157.5°	419.6	423.5
160°	413.3	415.5
162.5°	409.2	411.3
165°	403.4	405.6
167.5°	399.1	400.1
170°	398.0	398.0
172.5°	394.9	394.1
175°	393.0	393.0
177.5°	391.4	390.4
180°	390.4	390.4



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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	7.32	8.55	8.00	9.25	10.08	20.51	21.74	21.19	22.45	23.27
	3H	8.05	9.16	8.74	9.88	10.74	22.38	23.49	23.07	24.21	25.07
	4H	8.36	9.42	9.07	10.14	11.01	23.04	24.10	23.76	24.82	25.70
	6H	8.63	9.61	9.36	10.34	11.23	23.50	24.47	24.22	25.21	26.10
	8H	8.71	9.64	9.45	10.40	11.29	23.63	24.56	24.37	25.32	26.21
	12H	8.74	9.63	9.48	10.38	11.30	23.72	24.61	24.46	25.35	26.27
4H	2H	14.58	15.64	15.30	16.36	17.23	20.82	21.88	21.54	22.60	23.48
	3H	16.18	17.07	16.91	17.83	18.72	22.91	23.79	23.64	24.55	25.45
	4H	16.29	17.10	17.04	17.86	18.78	23.69	24.50	24.44	25.26	26.18
	6H	16.33	17.03	17.09	17.82	18.74	24.26	24.96	25.02	25.75	26.68
	8H	16.31	16.97	17.08	17.75	18.69	24.44	25.09	25.20	25.88	26.82
	12H	16.29	16.88	17.08	17.69	18.63	24.55	25.14	25.34	25.95	26.90
8H	4H	17.77	18.43	18.54	19.21	20.16	23.79	24.44	24.55	25.23	26.17
	6H	18.03	18.58	18.83	19.40	20.35	24.44	24.98	25.24	25.81	26.75
	8H	18.06	18.54	18.87	19.37	20.33	24.67	25.15	25.48	25.98	26.94
	12H	18.04	18.47	18.86	19.29	20.30	24.83	25.26	25.65	26.08	27.09
12H	4H	17.94	18.53	18.73	19.34	20.28	23.76	24.35	24.55	25.16	26.10
	6H	18.30	18.79	19.11	19.61	20.57	24.43	24.91	25.24	25.74	26.70
	8H	18.39	18.82	19.20	19.63	20.65	24.68	25.11	25.49	25.92	26.94