

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: P936416

Luminaire Tested: SQ4-FB-025U-100D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936416
REPORT IS A COMBINATION OF REPORTS P933455 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

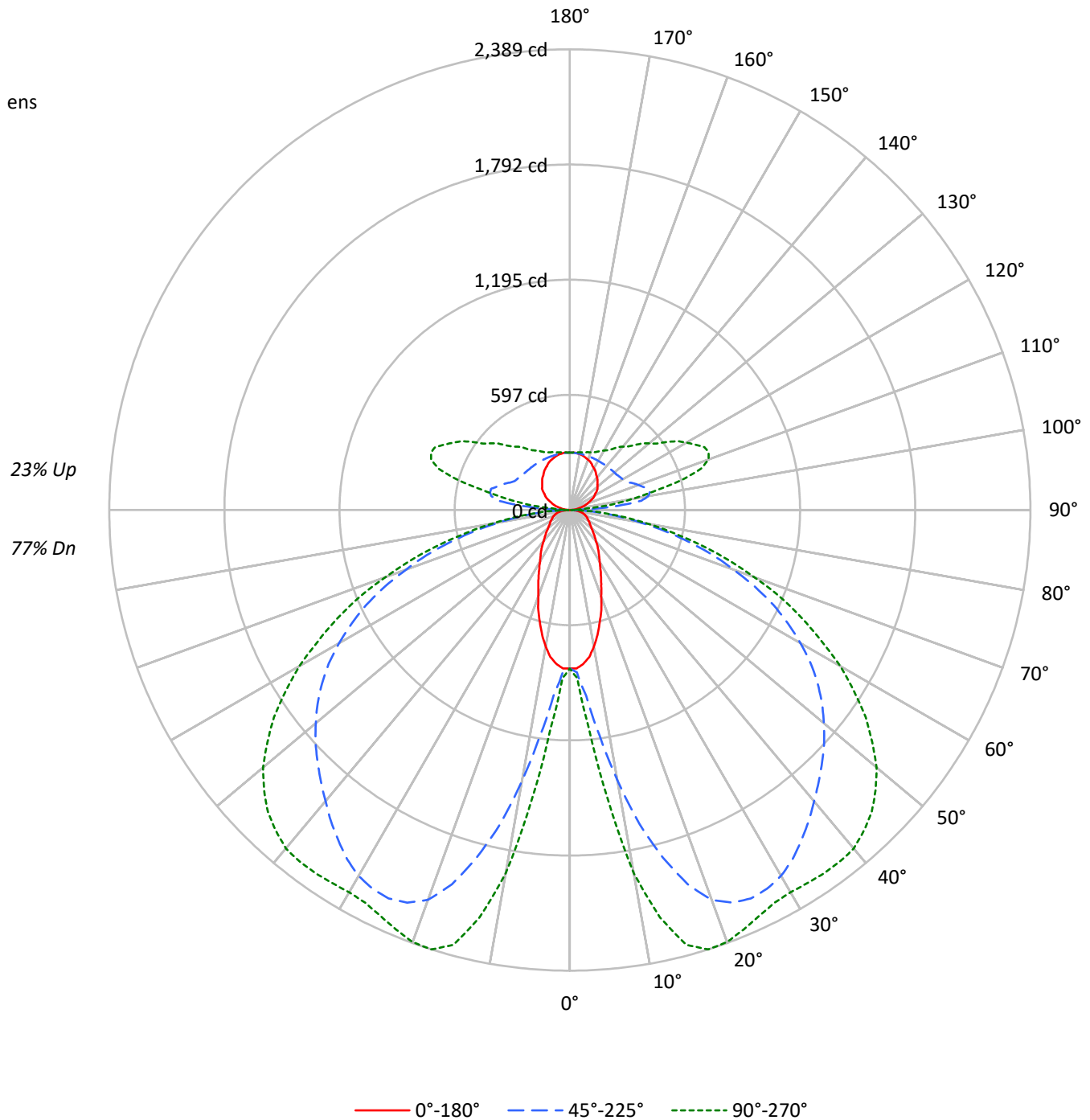
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8294.0 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 77.6
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	20	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°	3813	3813	3813
5°	3725	4407	5125
10°	3379	6424	8497
15°	2872	8393	10260
20°	2338	9726	10457
25°	1950	10178	10244
30°	1645	10243	10225
35°	1454	10073	10489
40°	1267	9851	10763
45°	1148	9690	10805
50°	1053	9544	10626
55°	1008	9330	10155
60°	1032	8921	9411
65°	1073	8298	8390
70°	1144	7237	7087
75°	1267	5900	5531
80°	1385	4092	3727
85°	1230	2172	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10805 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	1.3
10°-20°	471.2	5.7
20°-30°	824.2	9.9
30°-40°	1061.0	12.8
40°-50°	1185.0	14.3
50°-60°	1135.0	13.7
60°-70°	899.5	10.8
70°-80°	528.9	6.4
80°-90°	148.1	1.8
90°-100°	145.5	1.8
100°-110°	382.5	4.6
110°-120°	396.6	4.8
120°-130°	318.1	3.8
130°-140°	249.6	3.0
140°-150°	191.6	2.3
150°-160°	138.0	1.7
160°-170°	84.4	1.0
170°-180°	28.5	0.3
0°-30°	1401.7	16.9
0°-40°	2462.6	29.7
0°-60°	4782.7	57.7
0°-90°	6359.1	76.7
90°-120°	924.6	11.1
90°-150°	1684.0	20.3
90°-180°	1935.0	23.3
0°-180°	8294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	801	859	967	1094	1134	74
15°	600	1107	1866	2262	2334	167
25°	383	1255	2222	2320	2323	176
35°	259	1200	2093	2212	2299	162
45°	177	957	1850	2119	2215	137
55°	127	608	1570	1823	1874	116
65°	100	322	1165	1311	1329	100
75°	74	198	640	703	706	77
85°	26	61	159	174	177	28
90°	2	6	15	8	8	3
95°	19	75	251	129	88	21
105°	69	104	423	642	599	73
115°	122	149	339	676	771	121
125°	170	191	308	521	614	151
135°	203	223	298	420	476	157
145°	235	250	295	359	387	147
155°	266	273	295	324	333	122
165°	287	291	295	306	310	81
175°	298	298	297	300	300	28
180°	298	298	298	298	298	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9	821.9
2.5°	821.9	821.9	827.2	829.8	835.1	837.7	843.0	848.3	864.2	866.8	872.1
5°	800.7	811.3	845.7	858.9	895.9	946.1	967.2	1001.6	1072.9	1094.1	1107.3
7.5°	769.0	792.8	877.4	898.5	991.0	1123.1	1178.6	1252.6	1366.3	1421.8	1466.7
10°	718.8	769.0	919.7	969.9	1120.5	1321.3	1424.4	1527.5	1699.2	1775.9	1804.9
12.5°	663.3	745.2	964.6	1033.3	1250.0	1543.3	1667.5	1781.2	1976.7	2079.8	2095.6
15°	599.9	710.9	1006.9	1107.3	1387.4	1728.3	1865.7	2005.8	2188.1	2262.1	2280.6
17.5°	544.4	684.5	1046.5	1152.2	1493.1	1894.8	2034.9	2151.1	2299.1	2349.3	2362.6
20°	475.7	642.2	1072.9	1210.3	1604.1	2016.4	2151.1	2241.0	2341.4	2373.1	2378.4
22.5°	425.5	597.2	1088.8	1231.5	1678.1	2090.4	2204.0	2275.3	2344.1	2354.6	2357.3
25°	383.2	547.0	1086.1	1255.3	1741.5	2135.3	2222.5	2275.3	2315.0	2320.3	2320.3
27.5°	343.5	491.5	1075.6	1260.6	1789.1	2145.9	2214.6	2251.6	2270.1	2280.6	2280.6
30°	309.2	438.7	1049.1	1250.0	1810.2	2135.3	2190.8	2209.3	2227.8	2243.6	2251.6
32.5°	282.8	388.5	1009.5	1228.8	1812.9	2108.9	2148.5	2159.1	2185.5	2222.5	2235.7
35°	259.0	338.3	964.6	1199.8	1797.0	2066.6	2093.0	2103.6	2156.4	2211.9	2230.4
37.5°	235.2	301.3	906.4	1149.6	1773.2	2016.4	2034.9	2053.4	2135.3	2201.3	2222.5
40°	211.4	269.6	837.7	1094.1	1736.2	1955.6	1971.4	2000.5	2108.9	2185.5	2206.6
42.5°	192.9	243.1	763.7	1035.9	1688.7	1886.9	1910.7	1952.9	2077.1	2159.1	2182.9
45°	177.1	216.7	684.5	956.6	1627.9	1815.5	1849.9	1908.0	2040.1	2119.4	2140.6
47.5°	161.2	198.2	602.5	874.7	1561.8	1744.2	1789.1	1855.2	1989.9	2066.6	2085.1
50°	148.0	179.7	520.6	787.5	1490.5	1667.5	1720.4	1789.1	1926.5	1997.9	2021.6
52.5°	137.4	163.8	444.0	700.3	1408.5	1588.2	1649.0	1720.4	1849.9	1918.6	1934.4
55°	126.8	150.6	377.9	607.8	1324.0	1503.7	1569.7	1638.5	1765.3	1823.4	1834.0
57.5°	121.6	140.1	322.4	520.6	1234.1	1408.5	1482.5	1546.0	1664.9	1709.8	1720.4
60°	113.6	132.1	280.1	446.6	1136.4	1318.7	1382.1	1445.5	1546.0	1583.0	1590.9
62.5°	105.7	126.8	248.4	375.3	1035.9	1213.0	1276.4	1334.6	1419.1	1445.5	1456.1
65°	100.4	121.6	224.6	322.4	932.9	1102.0	1165.4	1215.6	1284.3	1310.8	1316.1
67.5°	95.1	116.3	206.1	277.5	829.8	991.0	1038.6	1086.1	1139.0	1165.4	1168.1
70°	87.2	111.0	190.3	245.8	724.1	864.2	903.8	954.0	996.3	1009.5	1017.4
72.5°	81.9	103.1	179.7	222.0	615.7	742.6	779.6	808.7	845.7	858.9	858.9
75°	74.0	92.5	169.1	198.2	504.8	607.8	639.5	668.6	697.7	703.0	695.0
77.5°	66.1	81.9	145.3	166.5	393.8	481.0	507.4	523.2	547.0	552.3	555.0
80°	55.5	71.4	113.6	129.5	285.4	354.1	372.6	385.8	407.0	407.0	412.3
82.5°	42.3	55.5	81.9	92.5	192.9	243.1	259.0	266.9	280.1	280.1	280.1
85°	26.4	34.4	52.9	60.8	116.3	148.0	158.6	161.2	171.8	174.4	174.4
87.5°	13.2	18.5	34.4	37.0	60.8	76.6	76.6	81.9	81.9	79.3	76.6
90°	2.0	3.6	5.2	5.6	8.8	13.1	15.2	13.5	10.1	7.6	7.6
92.5°	8.0	21.6	35.3	38.7	54.4	75.3	85.7	75.1	54.0	38.1	36.6
95°	19.2	44.1	69.1	75.3	133.7	211.6	250.6	223.6	169.7	129.2	124.6
97.5°	33.3	55.3	77.2	82.7	180.1	310.0	375.0	358.0	323.9	298.3	289.6
100°	44.1	64.0	83.9	88.9	197.0	341.1	413.2	414.5	417.0	418.9	408.5
102.5°	53.3	71.9	90.5	95.1	204.8	351.0	424.1	445.8	489.2	521.8	512.9
105°	68.9	84.7	100.5	104.4	210.6	352.1	422.9	471.6	569.0	642.0	637.2
107.5°	84.9	99.6	114.3	118.0	211.6	336.4	398.8	466.7	602.6	704.5	705.7
110°	95.8	109.0	122.3	125.6	210.0	322.5	378.8	454.7	606.6	720.5	725.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	106.4	119.0	131.6	134.8	210.1	310.4	360.6	438.3	593.7	710.3	718.0
115°	122.4	134.0	145.7	148.6	212.0	296.5	338.7	413.6	563.4	675.7	686.3
117.5°	138.2	148.8	159.4	162.1	216.0	287.8	323.7	391.3	526.4	627.8	639.6
120°	147.4	157.4	167.4	169.9	219.2	284.9	317.7	379.4	502.9	595.5	606.9
122.5°	156.4	166.5	176.6	179.1	223.8	283.3	313.1	368.7	479.9	563.3	574.6
125°	170.3	179.5	188.6	190.9	230.0	282.1	308.1	355.3	449.8	520.6	531.0
127.5°	181.5	190.7	200.0	202.3	236.2	281.3	303.9	344.5	425.6	486.4	495.2
130°	187.5	197.5	207.4	209.9	240.7	281.8	302.3	338.4	410.6	464.7	472.8
132.5°	193.7	203.7	213.6	216.1	244.4	282.1	300.9	333.2	397.8	446.3	453.6
135°	202.9	212.0	221.1	223.4	248.4	281.8	298.5	325.6	379.7	420.3	426.5
137.5°	212.3	221.3	230.3	232.6	254.4	283.5	298.1	321.0	366.7	401.0	406.1
140°	220.1	228.4	236.7	238.8	258.1	283.8	296.7	316.5	356.0	385.6	390.4
142.5°	226.2	233.8	241.5	243.4	261.2	284.9	296.7	314.1	348.8	374.8	378.9
145°	235.4	242.1	248.7	250.4	265.2	284.9	294.7	308.9	337.3	358.6	361.7
147.5°	244.6	251.1	257.6	259.2	271.0	286.8	294.7	305.9	328.2	344.9	347.5
150°	250.6	256.5	262.3	263.8	274.1	287.8	294.7	304.1	323.0	337.1	339.2
152.5°	256.8	261.2	265.7	266.8	276.1	288.5	294.7	302.7	318.8	330.9	332.5
155°	266.0	269.3	272.6	273.4	280.5	290.0	294.7	301.1	313.9	323.5	324.5
157.5°	272.8	276.0	279.2	280.0	284.9	291.4	294.7	299.7	309.6	317.1	317.8
160°	277.4	279.9	282.4	283.0	286.9	292.1	294.7	299.0	307.5	313.9	314.3
162.5°	282.0	283.9	285.7	286.2	289.0	292.8	294.7	298.3	305.5	310.9	311.3
165°	287.1	288.8	290.5	290.9	292.2	293.9	294.7	297.3	302.4	306.3	306.7
167.5°	291.7	292.5	293.3	293.5	294.6	296.0	296.7	298.4	301.8	304.3	304.5
170°	294.7	295.5	296.3	296.5	296.6	296.7	296.7	298.4	301.8	304.3	304.3
172.5°	296.3	296.5	296.7	296.7	296.7	296.7	296.7	298.0	300.7	302.7	302.5
175°	298.5	298.5	298.5	298.5	297.9	297.1	296.7	297.5	299.2	300.5	300.5
177.5°	298.5	298.5	298.5	298.5	298.0	297.4	297.1	297.8	299.1	300.1	299.9
180°	298.5	298.5	298.5	298.5	298.5	298.5	298.5	298.5	298.5	298.5	298.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	821.9	821.9
2.5°	877.4	872.1
5°	1128.4	1133.7
7.5°	1519.5	1516.9
10°	1889.5	1913.3
12.5°	2159.1	2164.4
15°	2322.9	2333.5
17.5°	2386.3	2389.0
20°	2389.0	2383.7
22.5°	2359.9	2354.6
25°	2325.6	2322.9
27.5°	2293.8	2296.5
30°	2280.6	2288.6
32.5°	2280.6	2293.8
35°	2285.9	2299.1
37.5°	2283.3	2299.1
40°	2272.7	2291.2
42.5°	2243.6	2256.8
45°	2198.7	2214.6
47.5°	2140.6	2151.1
50°	2066.6	2077.1
52.5°	1974.1	1976.7
55°	1863.1	1873.7
57.5°	1744.2	1746.8
60°	1612.0	1620.0
62.5°	1472.0	1472.0
65°	1324.0	1329.3
67.5°	1170.7	1183.9
70°	1014.8	1017.4
72.5°	861.5	861.5
75°	703.0	705.6
77.5°	552.3	552.3
80°	409.6	412.3
82.5°	282.8	288.1
85°	177.1	177.1
87.5°	81.9	74.0
90°	7.6	7.6
92.5°	30.5	24.4
95°	106.3	87.9
97.5°	254.6	219.7
100°	366.9	325.3
102.5°	477.3	441.7
105°	618.1	598.9
107.5°	710.3	714.9
110°	745.4	765.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	748.6	779.2
115°	728.8	771.2
117.5°	686.7	733.8
120°	652.7	698.5
122.5°	619.7	664.8
125°	572.6	614.2
127.5°	530.2	565.3
130°	505.2	537.6
132.5°	482.6	511.6
135°	451.5	476.5
137.5°	426.6	447.1
140°	409.5	428.7
142.5°	395.4	411.8
145°	374.2	386.6
147.5°	357.8	368.2
150°	347.6	356.0
152.5°	338.8	345.1
155°	328.7	332.9
157.5°	320.8	323.7
160°	316.0	317.7
162.5°	312.9	314.5
165°	308.4	310.1
167.5°	305.2	305.9
170°	304.3	304.3
172.5°	301.9	301.3
175°	300.5	300.5
177.5°	299.2	298.5
180°	298.5	298.5



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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	7.79	9.02	8.47	9.73	10.55	20.96	22.20	21.65	22.90	23.73
	3H	8.52	9.63	9.21	10.35	11.21	22.83	23.95	23.52	24.66	25.52
	4H	8.83	9.89	9.55	10.61	11.49	23.49	24.55	24.21	25.27	26.14
	6H	9.10	10.08	9.83	10.81	11.70	23.94	24.92	24.67	25.65	26.54
	8H	9.18	10.11	9.92	10.87	11.76	24.07	25.01	24.81	25.76	26.65
	12H	9.21	10.10	9.96	10.85	11.77	24.16	25.05	24.90	25.79	26.71
4H	2H	15.04	16.10	15.76	16.82	17.70	21.28	22.34	22.00	23.06	23.93
	3H	16.65	17.53	17.38	18.29	19.18	23.36	24.25	24.09	25.01	25.90
	4H	16.76	17.56	17.50	18.33	19.25	24.14	24.95	24.89	25.71	26.63
	6H	16.79	17.49	17.55	18.28	19.21	24.71	25.41	25.47	26.20	27.12
	8H	16.78	17.43	17.54	18.22	19.16	24.88	25.53	25.65	26.32	27.26
	12H	16.75	17.34	17.54	18.15	19.10	24.99	25.58	25.78	26.39	27.34
8H	4H	18.23	18.89	19.00	19.67	20.62	24.24	24.89	25.01	25.68	26.62
	6H	18.49	19.04	19.29	19.87	20.81	24.88	25.43	25.68	26.26	27.20
	8H	18.52	19.00	19.33	19.83	20.79	25.11	25.60	25.92	26.42	27.38
	12H	18.50	18.93	19.32	19.75	20.76	25.27	25.70	26.08	26.52	27.53
12H	4H	18.40	18.99	19.19	19.80	20.74	24.21	24.80	25.00	25.61	26.55
	6H	18.76	19.24	19.57	20.07	21.03	24.87	25.36	25.68	26.18	27.14
	8H	18.84	19.27	19.66	20.09	21.11	25.12	25.55	25.93	26.37	27.38