

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: P938435

Luminaire Tested: SQ4-FB-150U-100D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938435
REPORT IS A COMBINATION OF REPORTS P933631 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-92765-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

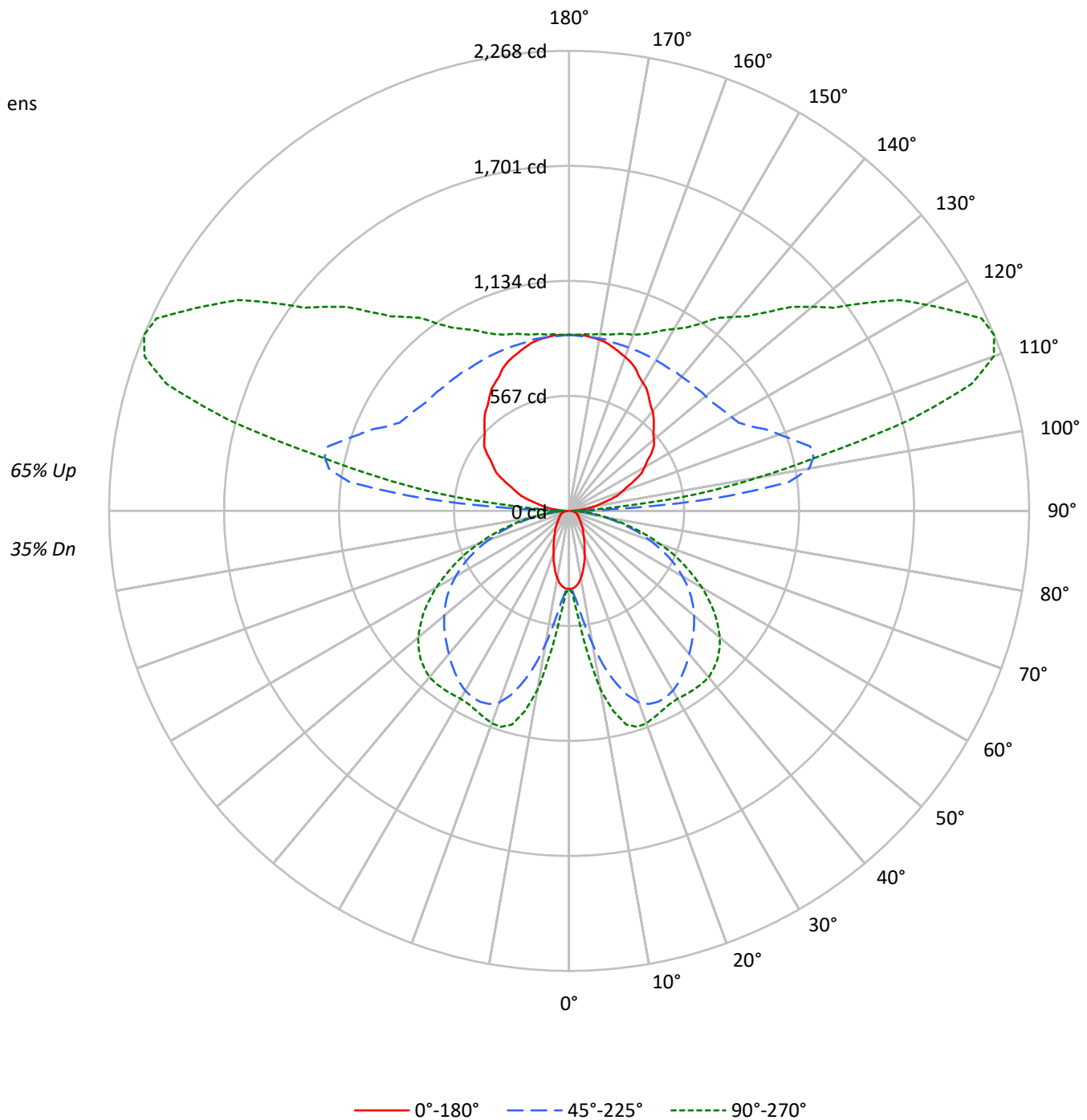
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8605.9 lumens
Efficiency: N/A
Efficacy: 118.9 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: Semi-Indirect

Input Watts (W): 72.4
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

TEST NUMBER: P938435
CATALOG NUMBER: SQ4-FB-150U-100D-92765-1D-UNV-STD-W-4-5000K

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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	42	42	42	35
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35	36	35	35	28
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29	32	30	29	23
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24	28	26	24	19
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	24	22	20	16
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	22	19	17	14
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15	19	17	15	12
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	18	15	13	10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11	16	13	11	9
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10	15	12	10	8
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3564	3564	3564
5°	3479	4116	4791
10°	3151	5996	7942
15°	2675	7828	9590
20°	2175	9065	9774
25°	1813	9478	9576
30°	1526	9532	9558
35°	1347	9366	9804
40°	1172	9152	10060
45°	1059	8993	10100
50°	970	8849	9933
55°	926	8642	9491
60°	945	8251	8797
65°	977	7663	7841
70°	1036	6669	6625
75°	1135	5423	5170
80°	1212	3747	3482
85°	1019	1978	1782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10100 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	0.6
10°-20°	220.2	2.6
20°-30°	385.2	4.5
30°-40°	495.8	5.8
40°-50°	553.8	6.4
50°-60°	530.4	6.2
60°-70°	420.4	4.9
70°-80°	247.2	2.9
80°-90°	72.0	0.8
90°-100°	423.4	4.9
100°-110°	1113.2	12.9
110°-120°	1154.3	13.4
120°-130°	925.9	10.8
130°-140°	726.5	8.4
140°-150°	557.6	6.5
150°-160°	401.6	4.7
160°-170°	245.7	2.9
170°-180°	83.0	1.0
0°-30°	655.1	7.6
0°-40°	1150.9	13.4
0°-60°	2235.2	26.0
0°-90°	2974.8	34.6
90°-120°	2690.9	31.3
90°-150°	4900.8	56.9
90°-180°	5631.0	65.4
0°-180°	8605.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	374	401	452	511	530	35
15°	280	518	872	1057	1090	78
25°	179	587	1039	1084	1086	82
35°	121	561	978	1034	1074	76
45°	83	447	864	990	1035	64
55°	59	284	734	852	876	54
65°	47	151	545	613	621	47
75°	35	93	299	328	330	36
85°	12	28	74	82	83	13
90°	6	16	44	22	22	6
95°	56	219	729	376	256	62
105°	201	304	1231	1868	1743	213
115°	356	433	986	1966	2244	352
125°	496	556	897	1515	1787	440
135°	590	650	869	1223	1387	457
145°	685	729	858	1044	1125	429
155°	774	796	858	942	969	356
165°	835	846	858	891	902	236
175°	869	869	863	874	874	82
180°	869	869	869	869	869	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1
2.5°	384.1	384.1	386.6	387.8	390.2	391.5	394.0	396.4	403.9	405.1	407.5
5°	374.3	379.2	395.2	401.4	418.7	442.1	452.0	468.1	501.5	511.3	517.5
7.5°	359.4	370.5	410.1	420.0	463.1	524.9	550.8	585.4	638.5	664.5	685.4
10°	335.9	359.4	429.8	453.2	523.6	617.6	665.7	713.8	794.1	829.9	843.6
12.5°	310.0	348.3	450.8	482.9	584.2	721.3	779.4	832.4	923.9	972.0	979.4
15°	280.3	332.2	470.5	517.5	648.4	807.8	872.0	937.4	1022.7	1057.2	1065.8
17.5°	254.4	319.9	489.0	538.5	697.9	885.5	951.0	1005.4	1074.5	1098.0	1104.2
20°	222.3	300.1	501.5	565.7	749.7	942.4	1005.4	1047.3	1094.3	1109.1	1111.6
22.5°	198.8	279.1	508.9	575.5	784.2	977.0	1030.0	1063.4	1095.5	1100.4	1101.6
25°	179.1	255.6	507.6	586.6	813.9	997.9	1038.6	1063.4	1081.9	1084.4	1084.4
27.5°	160.6	229.8	502.7	589.1	836.1	1002.8	1035.0	1052.3	1060.9	1065.8	1065.8
30°	144.5	205.0	490.3	584.2	846.0	997.9	1023.9	1032.5	1041.2	1048.6	1052.3
32.5°	132.2	181.5	471.8	574.3	847.2	985.6	1004.1	1009.0	1021.4	1038.6	1044.9
35°	121.0	158.1	450.8	560.7	839.8	965.8	978.2	983.1	1007.8	1033.8	1042.4
37.5°	109.9	140.8	423.6	537.3	828.7	942.4	951.0	959.7	997.9	1028.8	1038.6
40°	98.8	126.0	391.5	511.3	811.4	914.0	921.3	935.0	985.6	1021.4	1031.3
42.5°	90.2	113.7	357.0	484.2	789.2	881.8	892.9	912.7	970.8	1009.0	1020.1
45°	82.7	101.2	319.9	447.1	760.8	848.5	864.5	891.7	953.5	990.5	1000.4
47.5°	75.3	92.6	281.6	408.8	729.9	815.2	836.1	867.0	930.0	965.8	974.4
50°	69.2	84.0	243.3	368.1	696.5	779.4	804.0	836.1	900.4	933.7	944.8
52.5°	64.2	76.6	207.5	327.3	658.3	742.3	770.7	804.0	864.5	896.7	904.0
55°	59.3	70.4	176.7	284.1	618.8	702.7	733.7	765.7	825.1	852.2	857.1
57.5°	56.8	65.4	150.7	243.3	576.8	658.3	692.9	722.5	778.0	799.1	804.0
60°	53.1	61.8	131.0	208.7	531.1	616.3	646.0	675.6	722.5	739.8	743.5
62.5°	49.4	59.3	116.1	175.4	484.2	566.9	596.5	623.7	663.3	675.6	680.6
65°	46.9	56.8	105.0	150.7	435.9	515.0	544.7	568.1	600.3	612.6	615.0
67.5°	44.5	54.3	96.4	129.6	387.8	463.1	485.4	507.6	532.3	544.7	545.9
70°	40.8	51.9	88.9	114.9	338.4	403.9	422.4	445.9	465.6	471.8	475.5
72.5°	38.3	48.1	84.0	103.8	287.8	347.1	364.3	377.9	395.2	401.4	401.4
75°	34.6	43.2	79.1	92.6	235.9	284.1	298.9	312.5	326.0	328.5	324.8
77.5°	30.8	38.3	68.0	77.8	184.0	224.8	237.1	244.5	255.6	258.2	259.4
80°	25.9	33.4	53.1	60.5	133.4	165.5	174.1	180.3	190.2	190.2	192.6
82.5°	19.7	25.9	38.3	43.2	90.2	113.7	121.0	124.8	131.0	131.0	131.0
85°	12.3	16.1	24.7	28.4	54.3	69.2	74.1	75.3	80.3	81.5	81.5
87.5°	6.2	8.6	16.1	17.3	28.4	35.8	35.8	38.3	38.3	37.0	35.8
90°	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5	22.2	22.2
92.5°	23.3	62.9	102.6	112.5	158.2	219.0	249.5	218.6	157.0	110.8	106.4
95°	56.0	128.5	201.1	219.2	389.2	616.0	729.4	650.8	493.8	376.0	362.7
97.5°	96.7	160.8	224.8	240.8	524.3	902.4	1091.4	1041.7	942.5	868.1	842.6
100°	128.2	186.3	244.3	258.8	573.4	992.9	1202.7	1206.3	1213.6	1219.0	1188.8
102.5°	155.1	209.3	263.4	277.0	596.1	1021.4	1234.2	1297.4	1423.8	1518.7	1492.8
105°	200.6	246.5	292.3	303.8	612.7	1024.6	1230.6	1372.3	1655.8	1868.5	1854.6
107.5°	247.2	289.9	332.8	343.4	615.9	979.1	1160.7	1358.4	1753.8	2050.4	2053.7
110°	278.6	317.2	355.9	365.6	611.2	938.6	1102.4	1323.5	1765.5	2097.0	2111.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.6	346.4	383.2	392.4	611.4	903.4	1049.4	1275.6	1728.0	2067.3	2089.5
115°	356.2	390.1	424.1	432.6	617.0	862.9	985.8	1203.7	1639.6	1966.4	1997.4
117.5°	402.3	433.1	464.0	471.7	628.5	837.6	942.1	1138.8	1532.1	1827.1	1861.4
120°	429.0	458.1	487.1	494.4	637.7	829.0	924.6	1104.3	1463.7	1733.2	1766.5
122.5°	455.3	484.6	513.9	521.2	651.2	824.6	911.2	1073.0	1396.6	1639.4	1672.2
125°	495.6	522.2	549.0	555.6	669.2	820.9	896.7	1034.1	1309.0	1515.2	1545.4
127.5°	528.2	555.1	582.0	588.8	687.3	818.7	884.4	1002.5	1238.5	1415.5	1441.0
130°	545.7	574.7	603.6	610.9	700.6	820.0	879.7	984.8	1194.9	1352.5	1376.1
132.5°	563.7	592.8	621.8	629.1	711.2	820.9	875.6	969.7	1157.8	1298.9	1320.0
135°	590.5	617.0	643.4	650.0	722.9	820.0	868.6	947.4	1104.9	1223.1	1241.3
137.5°	617.9	644.1	670.3	676.8	740.4	825.2	867.5	934.1	1067.2	1167.2	1182.0
140°	640.7	664.9	689.0	695.0	751.1	826.0	863.4	920.9	1035.9	1122.2	1136.1
142.5°	658.2	680.5	702.7	708.3	760.0	828.9	863.4	914.0	1015.0	1090.8	1102.8
145°	685.0	704.5	723.8	728.7	771.7	829.0	857.6	898.9	981.5	1043.5	1052.6
147.5°	711.8	730.8	749.6	754.4	788.8	834.7	857.6	890.1	955.1	1003.9	1011.4
150°	729.4	746.5	763.5	767.8	797.7	837.6	857.6	885.1	939.9	981.2	987.2
152.5°	747.4	760.4	773.3	776.6	803.6	839.6	857.6	881.1	928.0	963.1	967.7
155°	774.2	783.8	793.4	795.8	816.4	843.9	857.6	876.3	913.6	941.5	944.6
157.5°	794.0	803.4	812.6	815.0	829.2	848.2	857.6	872.1	901.1	922.8	925.0
160°	807.4	814.7	822.0	823.8	835.1	850.1	857.6	870.0	894.9	913.5	914.7
162.5°	820.9	826.3	831.7	833.1	841.2	852.2	857.6	868.1	889.1	904.8	905.9
165°	835.4	840.3	845.3	846.5	850.2	855.2	857.6	865.1	880.1	891.3	892.6
167.5°	848.8	851.1	853.5	854.0	857.1	861.3	863.4	868.3	878.2	885.5	886.1
170°	857.6	859.9	862.3	862.8	863.0	863.3	863.4	868.3	878.2	885.5	885.5
172.5°	862.3	862.7	863.3	863.4	863.4	863.4	863.4	867.3	875.1	880.9	880.4
175°	868.6	868.6	868.6	868.6	866.8	864.5	863.4	865.8	870.8	874.5	874.5
177.5°	868.6	868.6	868.6	868.6	867.3	865.5	864.6	866.6	870.4	873.3	872.7
180°	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6	868.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	384.1	384.1
2.5°	410.1	407.5
5°	527.4	529.9
7.5°	710.2	708.9
10°	883.1	894.1
12.5°	1009.0	1011.5
15°	1085.7	1090.5
17.5°	1115.3	1116.5
20°	1116.5	1114.0
22.5°	1103.0	1100.4
25°	1086.9	1085.7
27.5°	1072.0	1073.2
30°	1065.8	1069.6
32.5°	1065.8	1072.0
35°	1068.4	1074.5
37.5°	1067.1	1074.5
40°	1062.2	1070.8
42.5°	1048.6	1054.7
45°	1027.6	1035.0
47.5°	1000.4	1005.4
50°	965.8	970.8
52.5°	922.6	923.9
55°	870.7	875.6
57.5°	815.2	816.4
60°	753.4	757.1
62.5°	687.9	687.9
65°	618.8	621.2
67.5°	547.2	553.3
70°	474.3	475.5
72.5°	402.7	402.7
75°	328.5	329.8
77.5°	258.2	258.2
80°	191.4	192.6
82.5°	132.2	134.6
85°	82.7	82.7
87.5°	38.3	34.6
90°	22.2	22.2
92.5°	88.7	71.1
95°	309.3	255.9
97.5°	741.1	639.5
100°	1067.8	946.8
102.5°	1389.2	1285.5
105°	1798.8	1743.1
107.5°	2067.2	2080.7
110°	2169.5	2227.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2178.7	2267.8
115°	2120.9	2244.5
117.5°	1998.4	2135.4
120°	1899.7	2032.9
122.5°	1803.6	1934.9
125°	1666.4	1787.4
127.5°	1543.1	1645.2
130°	1470.4	1564.7
132.5°	1404.4	1488.9
135°	1314.1	1386.9
137.5°	1241.7	1301.2
140°	1191.8	1247.6
142.5°	1150.7	1198.6
145°	1088.9	1125.2
147.5°	1041.4	1071.5
150°	1011.6	1035.9
152.5°	986.1	1004.4
155°	956.8	968.9
157.5°	933.5	942.1
160°	919.7	924.6
162.5°	910.6	915.3
165°	897.5	902.5
167.5°	888.2	890.2
170°	885.5	885.5
172.5°	878.6	876.8
175°	874.5	874.5
177.5°	870.7	868.6
180°	868.6	868.6



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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	3.80	4.56	4.87	5.64	7.11	16.94	17.70	18.01	18.78	20.25
	3H	4.50	5.18	5.58	6.27	7.76	18.75	19.44	19.84	20.52	22.02
	4H	4.79	5.44	5.88	6.53	8.03	19.38	20.03	20.48	21.12	22.62
	6H	5.04	5.63	6.14	6.73	8.24	19.80	20.40	20.90	21.49	23.00
	8H	5.10	5.67	6.21	6.78	8.28	19.91	20.48	21.01	21.59	23.09
	12H	5.12	5.66	6.23	6.76	8.29	19.97	20.51	21.08	21.61	23.14
4H	2H	10.98	11.63	12.08	12.72	14.21	17.20	17.85	18.30	18.94	20.44
	3H	12.54	13.08	13.65	14.20	15.71	19.22	19.77	20.33	20.88	22.39
	4H	12.63	13.13	13.74	14.23	15.76	19.97	20.47	21.09	21.58	23.11
	6H	12.63	13.06	13.75	14.19	15.71	20.50	20.92	21.61	22.05	23.57
	8H	12.61	13.01	13.73	14.13	15.67	20.65	21.05	21.77	22.17	23.71
	12H	12.56	12.92	13.70	14.06	15.60	20.73	21.09	21.87	22.22	23.77
8H	4H	14.05	14.45	15.17	15.57	17.11	20.03	20.43	21.15	21.55	23.09
	6H	14.29	14.62	15.43	15.79	17.32	20.64	20.97	21.78	22.13	23.67
	8H	14.31	14.60	15.46	15.74	17.30	20.85	21.14	22.00	22.28	23.84
	12H	14.27	14.53	15.42	15.67	17.26	20.98	21.24	22.13	22.38	23.97
12H	4H	14.19	14.55	15.33	15.68	17.23	19.98	20.34	21.11	21.47	23.02
	6H	14.55	14.84	15.69	15.98	17.53	20.62	20.91	21.77	22.05	23.61
	8H	14.61	14.87	15.76	16.00	17.60	20.84	21.09	21.99	22.23	23.82