

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: P937563

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937563
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

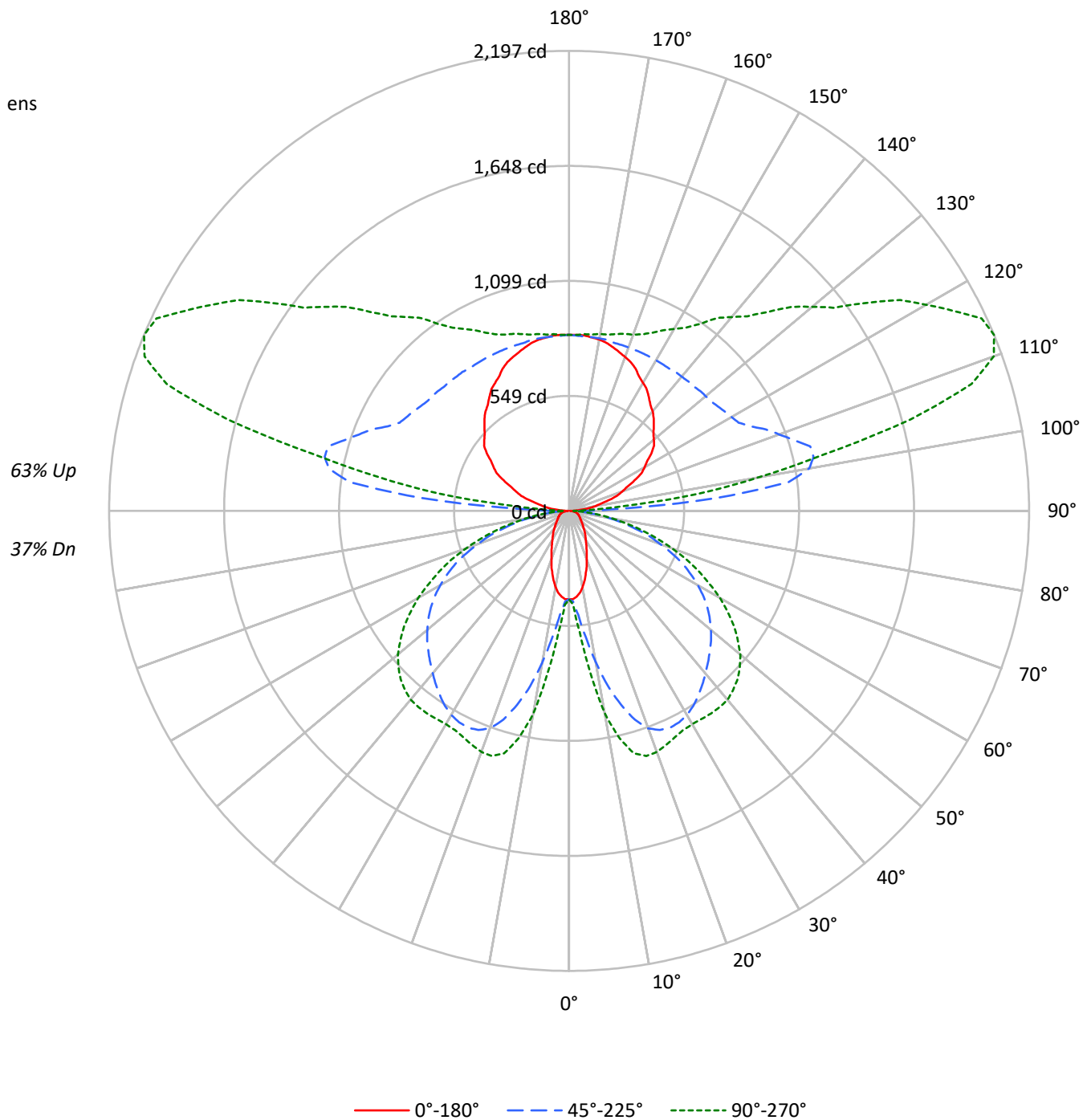
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8724.8 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 73.8
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	
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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2612	2612	2612
5°	2551	3018	3511
10°	2313	4399	5821
15°	1965	5746	7029
20°	1599	6657	7164
25°	1334	6965	7018
30°	1124	7007	7005
35°	994	6888	7186
40°	865	6735	7374
45°	783	6622	7402
50°	717	6520	7280
55°	687	6372	6956
60°	702	6090	6447
65°	729	5662	5747
70°	775	4933	4855
75°	855	4020	3789
80°	928	2783	2553
85°	811	1475	1307

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.6	0.6
10°-20°	242.1	2.8
20°-30°	423.5	4.9
30°-40°	545.1	6.2
40°-50°	608.9	7.0
50°-60°	583.1	6.7
60°-70°	462.1	5.3
70°-80°	271.7	3.1
80°-90°	78.7	0.9
90°-100°	410.2	4.7
100°-110°	1078.4	12.4
110°-120°	1118.1	12.8
120°-130°	896.9	10.3
130°-140°	703.7	8.1
140°-150°	540.2	6.2
150°-160°	389.0	4.5
160°-170°	238.0	2.7
170°-180°	80.4	0.9
0°-30°	720.2	8.3
0°-40°	1265.3	14.5
0°-60°	2457.3	28.2
0°-90°	3269.9	37.5
90°-120°	2606.7	29.9
90°-150°	4747.5	54.4
90°-180°	5455.0	62.5
0°-180°	8724.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	411	441	497	562	582	38
15°	308	569	959	1162	1199	86
25°	197	645	1142	1192	1194	91
35°	133	616	1075	1136	1181	83
45°	91	492	950	1089	1138	70
55°	65	312	806	937	963	59
65°	52	166	599	673	683	51
75°	38	102	329	361	362	40
85°	14	31	82	90	91	14
90°	6	16	43	22	22	6
95°	54	212	706	364	248	60
105°	194	294	1192	1810	1689	206
115°	345	419	955	1905	2174	341
125°	480	538	869	1468	1732	426
135°	572	630	841	1185	1344	443
145°	664	706	831	1011	1090	416
155°	750	771	831	912	939	345
165°	809	820	831	864	874	228
175°	841	841	836	847	847	80
180°	841	841	841	841	841	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3	422.3
2.5°	422.3	422.3	425.0	426.3	429.0	430.4	433.1	435.8	444.0	445.3	448.1
5°	411.4	416.8	434.5	441.3	460.3	486.1	496.9	514.6	551.2	562.1	568.9
7.5°	395.1	407.3	450.8	461.6	509.2	577.0	605.6	643.6	702.0	730.5	753.5
10°	369.3	395.1	472.5	498.3	575.7	678.9	731.8	784.8	873.0	912.4	927.3
12.5°	340.8	382.9	495.6	530.9	642.2	792.9	856.7	915.1	1015.6	1068.6	1076.8
15°	308.2	365.2	517.3	568.9	712.8	888.0	958.6	1030.6	1124.3	1162.3	1171.8
17.5°	279.7	351.7	537.7	592.0	767.1	973.5	1045.6	1105.3	1181.3	1207.1	1213.9
20°	244.4	329.9	551.2	621.8	824.1	1036.0	1105.3	1151.5	1203.0	1219.3	1222.1
22.5°	218.6	306.8	559.4	632.7	862.2	1074.1	1132.4	1169.1	1204.4	1209.8	1211.2
25°	196.9	281.1	558.0	644.9	894.8	1097.1	1142.0	1169.1	1189.5	1192.2	1192.2
27.5°	176.5	252.5	552.6	647.6	919.2	1102.6	1137.9	1156.9	1166.4	1171.8	1171.8
30°	158.9	225.4	539.0	642.2	930.1	1097.1	1125.7	1135.2	1144.7	1152.8	1156.9
32.5°	145.3	199.6	518.7	631.3	931.4	1083.6	1103.9	1109.4	1122.9	1142.0	1148.7
35°	133.1	173.8	495.6	616.4	923.3	1061.8	1075.4	1080.9	1108.0	1136.5	1146.0
37.5°	120.8	154.8	465.7	590.6	911.0	1036.0	1045.6	1055.1	1097.1	1131.1	1142.0
40°	108.6	138.5	430.4	562.1	892.0	1004.7	1012.9	1027.8	1083.6	1122.9	1133.8
42.5°	99.1	124.9	392.4	532.2	867.6	969.4	981.6	1003.4	1067.3	1109.4	1121.6
45°	91.0	111.3	351.7	491.5	836.4	932.8	950.4	980.3	1048.3	1089.0	1099.9
47.5°	82.8	101.8	309.6	449.4	802.4	896.1	919.2	953.1	1022.4	1061.8	1071.3
50°	76.0	92.3	267.5	404.6	765.8	856.7	883.9	919.2	989.8	1026.5	1038.8
52.5°	70.6	84.2	228.1	359.8	723.7	816.0	847.2	883.9	950.4	985.7	993.9
55°	65.2	77.4	194.2	312.3	680.2	772.6	806.5	841.8	907.0	936.8	942.3
57.5°	62.5	72.0	165.6	267.5	634.1	723.7	761.7	794.3	855.4	878.5	883.9
60°	58.4	67.9	143.9	229.5	583.8	677.5	710.1	742.7	794.3	813.3	817.4
62.5°	54.3	65.2	127.6	192.8	532.2	623.2	655.8	685.7	729.1	742.7	748.1
65°	51.6	62.5	115.4	165.6	479.3	566.2	598.8	624.6	659.9	673.4	676.2
67.5°	48.9	59.7	105.9	142.6	426.3	509.2	533.6	558.0	585.2	598.8	600.1
70°	44.8	57.0	97.8	126.3	372.0	444.0	464.3	490.1	511.9	518.7	522.7
72.5°	42.1	53.0	92.3	114.1	316.4	381.5	400.5	415.5	434.5	441.3	441.3
75°	38.0	47.5	86.9	101.8	259.3	312.3	328.6	343.5	358.4	361.2	357.1
77.5°	33.9	42.1	74.7	85.5	202.3	247.1	260.7	268.8	281.1	283.8	285.1
80°	28.5	36.7	58.4	66.5	146.6	181.9	191.4	198.2	209.1	209.1	211.8
82.5°	21.7	28.5	42.1	47.5	99.1	124.9	133.1	137.1	143.9	143.9	143.9
85°	13.6	17.7	27.2	31.2	59.7	76.0	81.5	82.8	88.3	89.6	89.6
87.5°	6.8	9.5	17.7	19.0	31.2	39.4	39.4	42.1	42.1	40.7	39.4
90°	5.6	10.1	14.7	15.8	24.9	36.9	42.9	38.1	28.6	21.5	21.5
92.5°	22.6	61.0	99.4	109.0	153.2	212.2	241.7	211.8	152.1	107.3	103.0
95°	54.2	124.5	194.8	212.4	377.1	596.7	706.5	630.4	478.3	364.2	351.3
97.5°	93.8	155.8	217.8	233.3	507.9	874.1	1057.2	1009.2	913.0	840.9	816.3
100°	124.3	180.5	236.7	250.7	555.5	961.8	1165.0	1168.6	1175.6	1180.9	1151.5
102.5°	150.3	202.8	255.2	268.3	577.4	989.5	1195.5	1256.8	1379.3	1471.2	1446.1
105°	194.2	238.7	283.1	294.3	593.6	992.7	1192.2	1329.5	1604.0	1810.0	1796.5
107.5°	239.4	280.9	322.3	332.6	596.6	948.4	1124.4	1315.9	1698.9	1986.2	1989.5
110°	269.9	307.3	344.8	354.1	592.1	909.3	1067.9	1282.0	1710.2	2031.4	2045.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.9	335.5	371.2	380.1	592.2	875.1	1016.5	1235.6	1673.9	2002.6	2024.1
115°	345.0	377.9	410.8	419.0	597.7	835.8	954.9	1166.0	1588.3	1904.9	1934.9
117.5°	389.7	419.5	449.4	456.8	608.7	811.3	912.6	1103.1	1484.1	1769.9	1803.1
120°	415.6	443.8	471.9	478.9	617.9	803.1	895.7	1069.7	1417.8	1679.0	1711.2
122.5°	441.1	469.4	497.8	504.9	630.8	798.7	882.7	1039.5	1352.9	1588.0	1619.9
125°	480.0	505.9	531.8	538.2	648.4	795.2	868.6	1001.7	1268.0	1467.8	1497.1
127.5°	511.7	537.8	563.9	570.4	665.8	793.1	856.7	971.1	1199.7	1371.2	1395.9
130°	528.6	556.8	584.8	591.9	678.7	794.4	852.2	953.9	1157.5	1310.2	1333.0
132.5°	546.1	574.2	602.3	609.4	689.0	795.2	848.2	939.4	1121.6	1258.3	1278.7
135°	572.1	597.7	623.3	629.7	700.3	794.4	841.4	917.7	1070.4	1184.9	1202.5
137.5°	598.6	623.9	649.4	655.7	717.2	799.3	840.4	904.9	1033.9	1130.6	1145.0
140°	620.7	644.0	667.4	673.2	727.6	800.1	836.4	892.1	1003.6	1087.1	1100.6
142.5°	637.6	659.2	680.8	686.2	736.3	803.0	836.4	885.3	983.2	1056.6	1068.2
145°	663.6	682.4	701.2	705.9	747.6	803.1	830.8	870.8	950.9	1010.9	1019.7
147.5°	689.6	707.8	726.1	730.7	764.0	808.5	830.8	862.3	925.3	972.5	979.7
150°	706.5	723.0	739.6	743.8	772.7	811.4	830.8	857.4	910.5	950.4	956.3
152.5°	724.0	736.6	749.1	752.3	778.4	813.3	830.8	853.5	898.9	932.9	937.4
155°	750.0	759.2	768.5	770.8	790.8	817.5	830.8	848.9	885.0	912.0	915.0
157.5°	769.2	778.3	787.2	789.5	803.2	821.6	830.8	844.8	872.9	894.0	896.1
160°	782.1	789.2	796.3	798.0	808.9	823.5	830.8	842.8	866.9	885.0	886.2
162.5°	795.2	800.4	805.7	807.0	814.9	825.5	830.8	840.9	861.3	876.5	877.6
165°	809.3	814.0	818.8	820.0	823.6	828.4	830.8	838.0	852.6	863.5	864.7
167.5°	822.2	824.5	826.8	827.3	830.3	834.4	836.4	841.2	850.7	857.8	858.4
170°	830.8	833.0	835.3	835.8	836.0	836.3	836.4	841.2	850.7	857.8	857.8
172.5°	835.3	835.7	836.3	836.4	836.4	836.4	836.4	840.2	847.7	853.3	852.8
175°	841.4	841.4	841.4	841.4	839.7	837.5	836.4	838.7	843.5	847.1	847.1
177.5°	841.4	841.4	841.4	841.4	840.2	838.5	837.5	839.4	843.2	846.0	845.4
180°	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	422.3	422.3
2.5°	450.8	448.1
5°	579.8	582.5
7.5°	780.7	779.3
10°	970.8	983.0
12.5°	1109.4	1112.1
15°	1193.5	1199.0
17.5°	1226.1	1227.5
20°	1227.5	1224.8
22.5°	1212.6	1209.8
25°	1194.9	1193.5
27.5°	1178.6	1180.0
30°	1171.8	1175.9
32.5°	1171.8	1178.6
35°	1174.5	1181.3
37.5°	1173.2	1181.3
40°	1167.7	1177.3
42.5°	1152.8	1159.6
45°	1129.7	1137.9
47.5°	1099.9	1105.3
50°	1061.8	1067.3
52.5°	1014.2	1015.6
55°	957.2	962.6
57.5°	896.1	897.5
60°	828.2	832.3
62.5°	756.3	756.3
65°	680.2	682.9
67.5°	601.5	608.3
70°	521.4	522.7
72.5°	442.6	442.6
75°	361.2	362.5
77.5°	283.8	283.8
80°	210.4	211.8
82.5°	145.3	148.0
85°	91.0	91.0
87.5°	42.1	38.0
90°	21.5	21.5
92.5°	85.9	68.9
95°	299.6	247.9
97.5°	717.9	619.5
100°	1034.3	917.1
102.5°	1345.6	1245.2
105°	1742.5	1688.6
107.5°	2002.6	2015.6
110°	2101.7	2157.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2110.5	2196.8
115°	2054.5	2174.3
117.5°	1935.9	2068.7
120°	1840.3	1969.3
122.5°	1747.1	1874.4
125°	1614.3	1731.5
127.5°	1494.9	1593.7
130°	1424.5	1515.8
132.5°	1360.5	1442.4
135°	1273.0	1343.5
137.5°	1202.8	1260.5
140°	1154.6	1208.6
142.5°	1114.7	1161.1
145°	1054.9	1090.0
147.5°	1008.9	1038.0
150°	979.9	1003.6
152.5°	955.2	973.0
155°	926.8	938.6
157.5°	904.3	912.6
160°	890.9	895.7
162.5°	882.1	886.6
165°	869.5	874.2
167.5°	860.4	862.3
170°	857.8	857.8
172.5°	851.1	849.4
175°	847.1	847.1
177.5°	843.4	841.4
180°	841.4	841.4



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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	3.07	3.85	4.12	4.91	6.35	16.23	17.02	17.28	18.08	19.52
	3H	3.77	4.47	4.83	5.54	7.00	18.06	18.77	19.12	19.84	21.29
	4H	4.06	4.73	5.13	5.80	7.26	18.70	19.37	19.77	20.44	21.90
	6H	4.31	4.93	5.39	6.00	7.47	19.12	19.74	20.20	20.81	22.29
	8H	4.37	4.96	5.46	6.05	7.52	19.24	19.83	20.33	20.92	22.39
	12H	4.39	4.95	5.48	6.03	7.52	19.30	19.86	20.39	20.94	22.44
4H	2H	10.27	10.94	11.35	12.01	13.47	16.50	17.17	17.58	18.24	19.70
	3H	11.83	12.39	12.91	13.49	14.96	18.53	19.09	19.62	20.19	21.67
	4H	11.92	12.43	13.01	13.52	15.02	19.29	19.81	20.39	20.90	22.39
	6H	11.93	12.37	13.03	13.48	14.97	19.82	20.27	20.92	21.38	22.87
	8H	11.90	12.31	13.00	13.42	14.92	19.98	20.39	21.08	21.50	23.00
	12H	11.85	12.23	12.97	13.34	14.85	20.07	20.44	21.19	21.56	23.07
8H	4H	13.35	13.77	14.45	14.87	16.38	19.35	19.76	20.45	20.86	22.37
	6H	13.59	13.93	14.72	15.08	16.58	19.97	20.31	21.09	21.46	22.96
	8H	13.61	13.91	14.74	15.04	16.56	20.18	20.48	21.31	21.61	23.13
	12H	13.57	13.84	14.71	14.96	16.52	20.32	20.59	21.46	21.71	23.27
12H	4H	13.49	13.87	14.61	14.98	16.49	19.30	19.67	20.41	20.79	22.30
	6H	13.85	14.15	14.98	15.28	16.80	19.95	20.25	21.08	21.38	22.90
	8H	13.91	14.18	15.05	15.30	16.86	20.17	20.44	21.31	21.56	23.12