

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: P938432

Luminaire Tested: SQ4-FB-150U-100D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938432
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-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

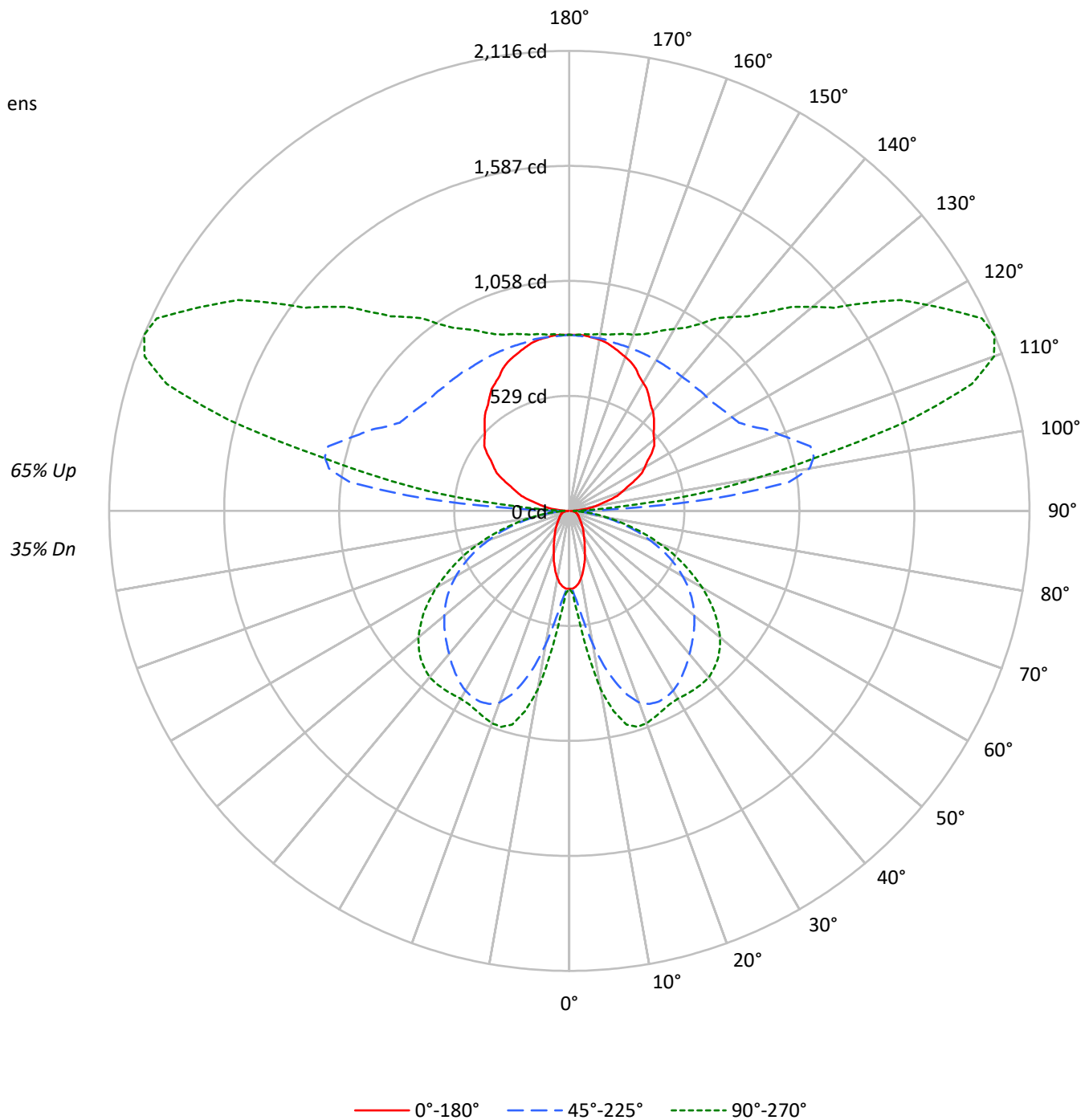
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8028.8 lumens
Efficiency: N/A
Efficacy: 110.9 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

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CATALOG NUMBER: SQ4-FB-150U-100D-92765-1D-UNV-STD-W-4-3000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3325	3325	3325
5°	3246	3840	4470
10°	2940	5594	7410
15°	2495	7303	8947
20°	2030	8458	9118
25°	1691	8843	8934
30°	1424	8892	8917
35°	1257	8738	9148
40°	1094	8539	9385
45°	988	8390	9422
50°	904	8256	9267
55°	864	8063	8855
60°	881	7698	8206
65°	913	7148	7316
70°	965	6222	6180
75°	1059	5060	4824
80°	1133	3497	3249
85°	952	1847	1663

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9422 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	0.6
10°-20°	205.4	2.6
20°-30°	359.3	4.5
30°-40°	462.6	5.8
40°-50°	516.7	6.4
50°-60°	494.9	6.2
60°-70°	392.2	4.9
70°-80°	230.6	2.9
80°-90°	67.2	0.8
90°-100°	395.0	4.9
100°-110°	1038.6	12.9
110°-120°	1076.9	13.4
120°-130°	863.8	10.8
130°-140°	677.8	8.4
140°-150°	520.2	6.5
150°-160°	374.6	4.7
160°-170°	229.2	2.9
170°-180°	77.4	1.0
0°-30°	611.1	7.6
0°-40°	1073.7	13.4
0°-60°	2085.3	26.0
0°-90°	2775.3	34.6
90°-120°	2510.5	31.3
90°-150°	4572.2	56.9
90°-180°	5254.0	65.4
0°-180°	8028.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	349	374	422	477	494	32
15°	262	483	814	986	1017	73
25°	167	547	969	1012	1013	77
35°	113	523	913	964	1002	71
45°	77	417	806	924	966	60
55°	55	265	684	795	817	50
65°	44	141	508	572	580	43
75°	32	86	279	306	308	34
85°	12	26	69	76	77	12
90°	5	15	41	21	21	5
95°	52	204	680	351	239	58
105°	187	283	1148	1743	1626	198
115°	332	404	920	1835	2094	328
125°	462	518	836	1414	1668	410
135°	551	606	810	1141	1294	426
145°	639	680	800	974	1050	400
155°	722	742	800	878	904	332
165°	779	790	800	832	842	220
175°	810	810	806	816	816	77
180°	810	810	810	810	810	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3
2.5°	358.3	358.3	360.7	361.8	364.1	365.3	367.6	369.8	376.8	377.9	380.2
5°	349.2	353.8	368.7	374.5	390.6	412.5	421.7	436.7	467.8	477.0	482.8
7.5°	335.3	345.7	382.6	391.8	432.1	489.7	513.9	546.2	595.7	619.9	639.5
10°	313.4	335.3	401.0	422.8	488.5	576.2	621.1	666.0	740.9	774.3	787.0
12.5°	289.3	324.9	420.6	450.5	545.0	672.9	727.1	776.6	861.9	906.8	913.7
15°	261.5	309.9	439.0	482.8	604.9	753.6	813.5	874.6	954.1	986.4	994.4
17.5°	237.4	298.4	456.2	502.4	651.1	826.2	887.2	938.0	1002.5	1024.4	1030.1
20°	207.4	280.0	467.8	527.8	699.5	879.2	938.0	977.1	1020.9	1034.8	1037.0
22.5°	185.5	260.4	474.7	536.9	731.6	911.4	961.0	992.1	1022.0	1026.6	1027.8
25°	167.1	238.5	473.6	547.3	759.4	931.0	969.0	992.1	1009.4	1011.6	1011.6
27.5°	149.8	214.3	469.0	549.6	780.0	935.6	965.6	981.7	989.8	994.4	994.4
30°	134.8	191.2	457.5	545.0	789.3	931.0	955.2	963.2	971.4	978.2	981.7
32.5°	123.3	169.3	440.2	535.8	790.4	919.5	936.7	941.4	952.9	969.0	974.8
35°	112.9	147.5	420.6	523.1	783.5	901.1	912.6	917.2	940.2	964.5	972.5
37.5°	102.6	131.3	395.2	501.2	773.1	879.2	887.2	895.3	931.0	959.8	969.0
40°	92.2	117.6	365.3	477.0	757.0	852.7	859.6	872.3	919.5	952.9	962.1
42.5°	84.2	106.0	333.0	451.7	736.3	822.7	833.1	851.5	905.7	941.4	951.7
45°	77.2	94.4	298.4	417.1	709.7	791.6	806.5	831.9	889.6	924.1	933.3
47.5°	70.3	86.4	262.7	381.4	681.0	760.5	780.0	808.9	867.7	901.1	909.1
50°	64.5	78.4	227.0	343.4	649.8	727.1	750.1	780.0	840.0	871.1	881.5
52.5°	59.9	71.4	193.6	305.4	614.2	692.5	719.0	750.1	806.5	836.5	843.4
55°	55.3	65.7	164.8	265.0	577.3	655.6	684.5	714.4	769.7	795.0	799.7
57.5°	53.0	61.0	140.6	227.0	538.1	614.2	646.4	674.1	725.9	745.5	750.1
60°	49.5	57.6	122.2	194.7	495.5	574.9	602.7	630.3	674.1	690.2	693.6
62.5°	46.1	55.3	108.3	163.6	451.7	528.9	556.5	581.9	618.8	630.3	634.9
65°	43.8	53.0	97.9	140.6	406.7	480.5	508.1	530.0	560.0	571.5	573.8
67.5°	41.5	50.7	89.9	121.0	361.8	432.1	452.8	473.6	496.6	508.1	509.3
70°	38.0	48.4	82.9	107.2	315.7	376.8	394.1	416.0	434.4	440.2	443.6
72.5°	35.8	44.9	78.4	96.8	268.5	323.8	339.9	352.6	368.7	374.5	374.5
75°	32.3	40.3	73.8	86.4	220.1	265.0	278.9	291.5	304.2	306.5	303.0
77.5°	28.8	35.8	63.4	72.6	171.7	209.7	221.2	228.1	238.5	240.9	242.0
80°	24.2	31.1	49.5	56.4	124.4	154.4	162.5	168.2	177.5	177.5	179.7
82.5°	18.4	24.2	35.8	40.3	84.2	106.0	112.9	116.4	122.2	122.2	122.2
85°	11.5	15.0	23.0	26.5	50.7	64.5	69.2	70.3	74.9	76.0	76.0
87.5°	5.8	8.0	15.0	16.1	26.5	33.4	33.4	35.8	35.8	34.5	33.4
90°	5.4	9.8	14.1	15.3	24.0	35.6	41.3	36.7	27.6	20.7	20.7
92.5°	21.7	58.7	95.7	105.0	147.5	204.3	232.7	204.0	146.5	103.3	99.2
95°	52.2	119.9	187.6	204.5	363.1	574.7	680.4	607.2	460.7	350.8	338.3
97.5°	90.3	150.0	209.7	224.6	489.1	841.9	1018.2	971.9	879.3	809.9	786.1
100°	119.6	173.8	227.9	241.5	535.0	926.4	1122.0	1125.4	1132.2	1137.3	1109.1
102.5°	144.7	195.2	245.7	258.4	556.1	953.0	1151.4	1210.4	1328.4	1416.9	1392.7
105°	187.1	230.0	272.7	283.4	571.6	955.9	1148.1	1280.3	1544.8	1743.2	1730.2
107.5°	230.7	270.5	310.4	320.4	574.6	913.5	1082.9	1267.3	1636.2	1912.9	1916.0
110°	260.0	296.0	332.1	341.1	570.2	875.7	1028.5	1234.7	1647.1	1956.4	1969.9



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CATALOG NUMBER: SQ4-FB-150U-100D-92765-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.8	323.2	357.5	366.1	570.4	842.8	979.0	1190.1	1612.1	1928.7	1949.4
115°	332.3	364.0	395.6	403.6	575.6	805.1	919.7	1123.0	1529.6	1834.6	1863.4
117.5°	375.3	404.1	432.9	440.0	586.4	781.4	878.9	1062.4	1429.4	1704.6	1736.6
120°	400.3	427.4	454.4	461.2	595.0	773.4	862.6	1030.2	1365.5	1617.0	1648.1
122.5°	424.8	452.1	479.4	486.2	607.5	769.3	850.1	1001.1	1303.0	1529.5	1560.1
125°	462.4	487.2	512.1	518.3	624.4	765.8	836.5	964.7	1221.2	1413.6	1441.8
127.5°	492.8	517.9	543.0	549.3	641.2	763.8	825.1	935.3	1155.4	1320.6	1344.4
130°	509.1	536.1	563.2	570.0	653.6	765.0	820.8	918.8	1114.8	1261.8	1283.8
132.5°	525.9	553.0	580.1	586.9	663.5	765.8	816.9	904.6	1080.2	1211.8	1231.5
135°	551.0	575.6	600.2	606.4	674.4	765.0	810.4	883.9	1030.8	1141.1	1158.1
137.5°	576.5	600.9	625.3	631.4	690.7	769.8	809.3	871.4	995.7	1088.9	1102.8
140°	597.8	620.3	642.8	648.4	700.8	770.6	805.5	859.1	966.5	1047.0	1060.0
142.5°	614.1	634.8	655.6	660.8	709.1	773.3	805.5	852.7	946.9	1017.7	1028.8
145°	639.1	657.3	675.3	679.8	720.0	773.4	800.1	838.6	915.7	973.5	982.0
147.5°	664.1	681.8	699.4	703.8	735.9	778.7	800.1	830.4	891.0	936.6	943.5
150°	680.4	696.4	712.3	716.3	744.2	781.4	800.1	825.7	876.9	915.4	921.0
152.5°	697.3	709.4	721.4	724.5	749.7	783.3	800.1	822.0	865.8	898.5	902.8
155°	722.3	731.3	740.2	742.4	761.6	787.3	800.1	817.5	852.3	878.4	881.3
157.5°	740.8	749.5	758.1	760.3	773.6	791.3	800.1	813.6	840.6	861.0	863.0
160°	753.3	760.1	766.9	768.5	779.1	793.1	800.1	811.7	834.9	852.2	853.4
162.5°	765.8	770.9	775.9	777.2	784.8	795.0	800.1	809.9	829.5	844.1	845.2
165°	779.4	784.0	788.6	789.7	793.2	797.8	800.1	807.1	821.1	831.6	832.7
167.5°	791.9	794.1	796.3	796.8	799.7	803.6	805.5	810.1	819.3	826.2	826.7
170°	800.1	802.3	804.5	805.0	805.1	805.4	805.5	810.1	819.3	826.2	826.2
172.5°	804.5	804.9	805.4	805.5	805.5	805.5	805.5	809.2	816.4	821.8	821.4
175°	810.4	810.4	810.4	810.4	808.7	806.5	805.5	807.8	812.4	815.9	815.9
177.5°	810.4	810.4	810.4	810.4	809.2	807.5	806.6	808.5	812.0	814.7	814.2
180°	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4	810.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	358.3	358.3
2.5°	382.6	380.2
5°	492.0	494.4
7.5°	662.6	661.4
10°	823.9	834.2
12.5°	941.4	943.7
15°	1012.9	1017.4
17.5°	1040.5	1041.6
20°	1041.6	1039.3
22.5°	1029.0	1026.6
25°	1014.0	1012.9
27.5°	1000.1	1001.3
30°	994.4	997.9
32.5°	994.4	1000.1
35°	996.7	1002.5
37.5°	995.5	1002.5
40°	991.0	999.0
42.5°	978.2	984.0
45°	958.7	965.6
47.5°	933.3	938.0
50°	901.1	905.7
52.5°	860.7	861.9
55°	812.3	816.9
57.5°	760.5	761.6
60°	702.9	706.3
62.5°	641.8	641.8
65°	577.3	579.6
67.5°	510.5	516.2
70°	442.5	443.6
72.5°	375.7	375.7
75°	306.5	307.7
77.5°	240.9	240.9
80°	178.6	179.7
82.5°	123.3	125.6
85°	77.2	77.2
87.5°	35.8	32.3
90°	20.7	20.7
92.5°	82.8	66.4
95°	288.6	238.8
97.5°	691.4	596.6
100°	996.2	883.3
102.5°	1296.0	1199.3
105°	1678.2	1626.3
107.5°	1928.6	1941.1
110°	2024.1	2078.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2032.6	2115.7
115°	1978.7	2094.0
117.5°	1864.4	1992.2
120°	1772.3	1896.6
122.5°	1682.7	1805.2
125°	1554.7	1667.6
127.5°	1439.6	1534.9
130°	1371.8	1459.8
132.5°	1310.2	1389.1
135°	1226.0	1293.9
137.5°	1158.4	1214.0
140°	1111.9	1163.9
142.5°	1073.6	1118.2
145°	1015.9	1049.8
147.5°	971.6	999.7
150°	943.8	966.5
152.5°	920.0	937.1
155°	892.6	904.0
157.5°	870.9	878.9
160°	858.0	862.6
162.5°	849.5	853.9
165°	837.3	841.9
167.5°	828.6	830.5
170°	826.2	826.2
172.5°	819.7	818.1
175°	815.9	815.9
177.5°	812.3	810.4
180°	810.4	810.4



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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	3.56	4.32	4.63	5.40	6.87	16.70	17.46	17.77	18.54	20.01
	3H	4.26	4.94	5.34	6.03	7.52	18.51	19.20	19.59	20.28	21.77
	4H	4.55	5.20	5.64	6.29	7.78	19.14	19.79	20.24	20.88	22.38
	6H	4.80	5.39	5.90	6.49	8.00	19.56	20.15	20.66	21.25	22.76
	8H	4.86	5.43	5.97	6.54	8.04	19.67	20.24	20.77	21.34	22.85
	12H	4.88	5.42	5.99	6.52	8.05	19.73	20.27	20.84	21.37	22.90
4H	2H	10.74	11.39	11.84	12.47	13.97	16.96	17.61	18.06	18.70	20.19
	3H	12.30	12.84	13.40	13.95	15.46	18.98	19.52	20.09	20.64	22.15
	4H	12.39	12.89	13.50	13.99	15.52	19.73	20.23	20.85	21.34	22.87
	6H	12.39	12.82	13.51	13.95	15.47	20.25	20.68	21.37	21.81	23.33
	8H	12.37	12.77	13.49	13.89	15.43	20.41	20.81	21.53	21.93	23.47
	12H	12.32	12.68	13.46	13.81	15.36	20.49	20.85	21.62	21.98	23.53
8H	4H	13.81	14.21	14.93	15.33	16.87	19.79	20.19	20.91	21.31	22.85
	6H	14.05	14.38	15.19	15.54	17.08	20.40	20.73	21.54	21.89	23.43
	8H	14.07	14.36	15.21	15.50	17.06	20.61	20.90	21.76	22.04	23.60
	12H	14.03	14.29	15.18	15.43	17.02	20.74	21.00	21.89	22.13	23.73
12H	4H	13.95	14.31	15.09	15.44	16.99	19.73	20.10	20.87	21.23	22.77
	6H	14.30	14.60	15.45	15.74	17.29	20.38	20.67	21.53	21.81	23.37
	8H	14.37	14.62	15.52	15.76	17.35	20.60	20.85	21.75	21.99	23.58