

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: P936254

Luminaire Tested: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936254
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-12-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

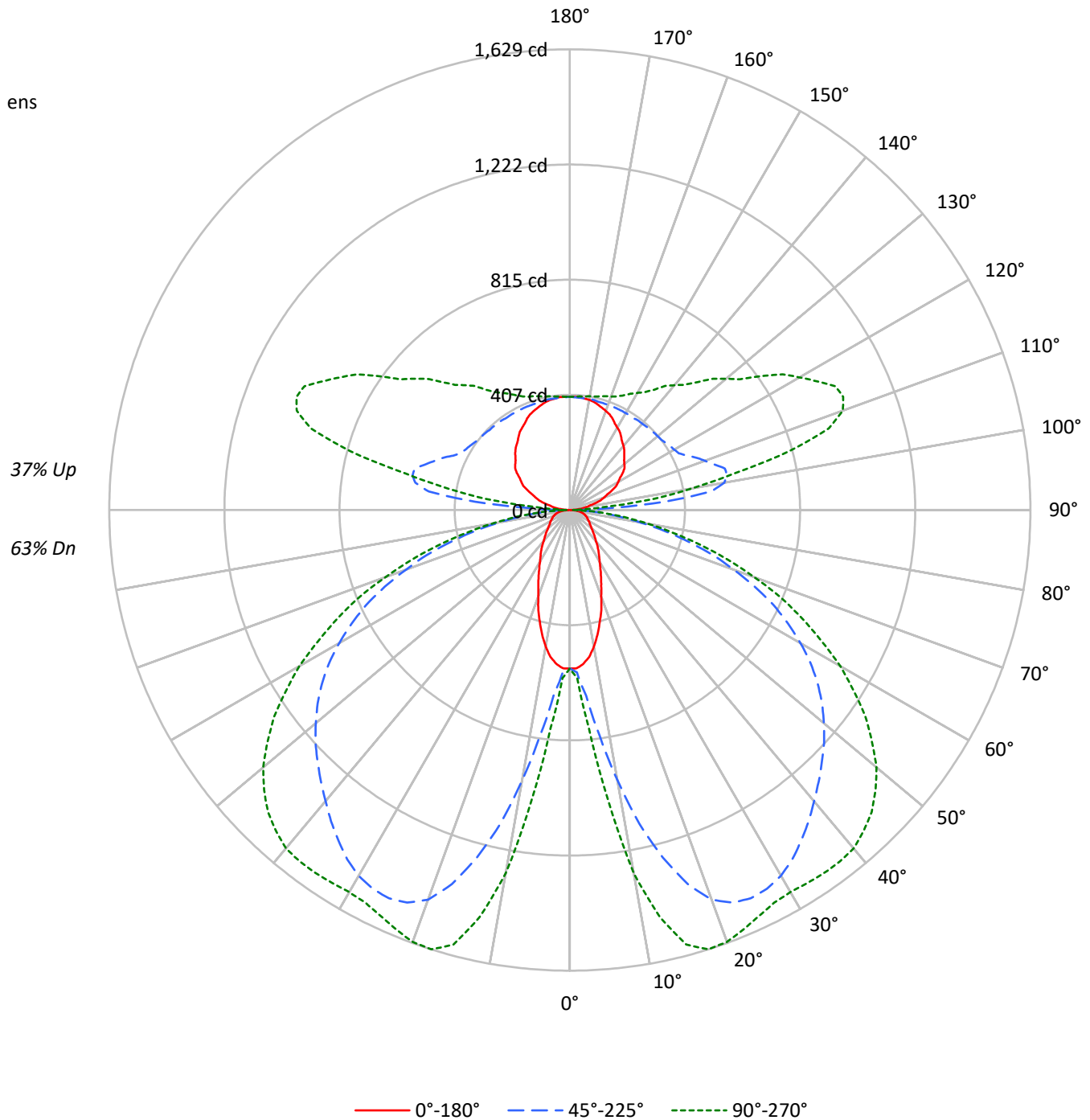
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6934.2 lumens
Efficiency: N/A
Efficacy: 105.1 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): 66
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





TEST NUMBER: P936254

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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1733	1733	1733
5°	1694	2003	2329
10°	1537	2921	3862
15°	1307	3817	4663
20°	1064	4425	4752
25°	888	4631	4656
30°	749	4662	4647
35°	663	4586	4767
40°	578	4487	4891
45°	524	4414	4911
50°	481	4349	4829
55°	461	4254	4615
60°	472	4069	4277
65°	493	3787	3812
70°	525	3305	3221
75°	584	2696	2514
80°	645	1872	1693
85°	583	995	867

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4911 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	1.0
10°-20°	321.2	4.6
20°-30°	561.8	8.1
30°-40°	723.2	10.4
40°-50°	807.8	11.6
50°-60°	773.7	11.2
60°-70°	613.2	8.8
70°-80°	360.6	5.2
80°-90°	101.7	1.5
90°-100°	195.4	2.8
100°-110°	513.7	7.4
110°-120°	532.6	7.7
120°-130°	427.2	6.2
130°-140°	335.2	4.8
140°-150°	257.3	3.7
150°-160°	185.3	2.7
160°-170°	113.4	1.6
170°-180°	38.3	0.6
0°-30°	955.5	13.8
0°-40°	1678.7	24.2
0°-60°	3260.3	47.0
0°-90°	4335.7	62.5
90°-120°	1241.7	17.9
90°-150°	2261.5	32.6
90°-180°	2598.0	37.5
0°-180°	6934.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	546	585	659	746	773	50
15°	409	755	1272	1542	1591	114
25°	261	856	1515	1582	1584	120
35°	177	818	1427	1508	1567	110
45°	121	652	1261	1445	1510	93
55°	86	414	1070	1243	1277	79
65°	68	220	794	894	906	68
75°	50	135	436	479	481	53
85°	18	42	108	119	121	19
90°	3	8	20	10	10	3
95°	26	101	336	174	118	29
105°	93	140	568	862	804	98
115°	164	200	455	907	1036	162
125°	229	256	414	699	825	203
135°	272	300	401	564	640	211
145°	316	336	396	482	519	198
155°	357	367	396	434	447	164
165°	386	391	396	411	416	109
175°	401	401	398	404	404	38
180°	401	401	401	401	401	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	560.3	560.3	563.9	565.7	569.2	571.0	574.7	578.3	589.1	590.9	594.5
5°	545.9	553.0	576.5	585.4	610.7	644.9	659.3	682.8	731.4	745.8	754.8
7.5°	524.2	540.4	598.1	612.5	675.6	765.7	803.5	853.9	931.4	969.2	999.8
10°	490.0	524.2	626.9	661.2	763.8	900.8	971.0	1041.2	1158.4	1210.6	1230.4
12.5°	452.1	508.0	657.5	704.3	852.1	1052.1	1136.8	1214.2	1347.5	1417.8	1428.6
15°	409.0	484.6	686.3	754.8	945.8	1178.1	1271.9	1367.3	1491.7	1542.1	1554.7
17.5°	371.1	466.5	713.4	785.5	1017.9	1291.7	1387.1	1466.4	1567.3	1601.5	1610.6
20°	324.3	437.8	731.4	825.1	1093.5	1374.6	1466.4	1527.7	1596.2	1617.7	1621.3
22.5°	290.1	407.1	742.2	839.5	1143.9	1425.0	1502.4	1551.1	1598.0	1605.1	1606.9
25°	261.3	372.9	740.4	855.7	1187.2	1455.6	1515.0	1551.1	1578.1	1581.7	1581.7
27.5°	234.2	335.1	733.2	859.3	1219.6	1462.9	1509.7	1534.8	1547.5	1554.7	1554.7
30°	210.8	299.0	715.2	852.1	1234.0	1455.6	1493.5	1506.1	1518.6	1529.5	1534.8
32.5°	192.8	264.8	688.1	837.7	1235.8	1437.6	1464.6	1471.8	1489.8	1515.0	1524.1
35°	176.6	230.6	657.5	817.9	1225.1	1408.8	1426.8	1434.0	1470.0	1507.9	1520.4
37.5°	160.4	205.4	617.9	783.7	1208.8	1374.6	1387.1	1399.7	1455.6	1500.6	1515.0
40°	144.1	183.7	571.0	745.8	1183.6	1333.1	1344.0	1363.7	1437.6	1489.8	1504.2
42.5°	131.5	165.7	520.6	706.2	1151.2	1286.3	1302.5	1331.3	1415.9	1471.8	1488.0
45°	120.7	147.7	466.5	652.1	1109.7	1237.6	1261.0	1300.7	1390.8	1444.8	1459.2
47.5°	109.9	135.1	410.8	596.3	1064.7	1189.0	1219.6	1264.6	1356.5	1408.8	1421.4
50°	100.9	122.5	354.9	536.8	1016.0	1136.8	1172.8	1219.6	1313.3	1361.9	1378.2
52.5°	93.6	111.7	302.6	477.4	960.2	1082.7	1124.2	1172.8	1261.0	1307.9	1318.7
55°	86.5	102.7	257.6	414.4	902.6	1025.0	1070.1	1116.9	1203.4	1243.1	1250.2
57.5°	82.9	95.4	219.8	354.9	841.3	960.2	1010.6	1053.9	1134.9	1165.6	1172.8
60°	77.4	90.1	191.0	304.5	774.6	899.0	942.2	985.4	1053.9	1079.1	1084.5
62.5°	72.1	86.5	169.3	255.8	706.2	826.9	870.2	909.7	967.4	985.4	992.6
65°	68.5	82.9	153.1	219.8	635.9	751.3	794.5	828.7	875.5	893.5	897.1
67.5°	64.8	79.2	140.5	189.2	565.7	675.6	708.0	740.4	776.4	794.5	796.3
70°	59.4	75.7	129.7	167.5	493.6	589.1	616.2	650.4	679.2	688.1	693.6
72.5°	55.9	70.3	122.5	151.3	419.7	506.2	531.5	551.2	576.5	585.4	585.4
75°	50.4	63.0	115.3	135.1	344.1	414.4	435.9	455.8	475.6	479.2	473.8
77.5°	45.0	55.9	99.1	113.5	268.4	327.9	345.9	356.7	372.9	376.5	378.3
80°	37.9	48.6	77.4	88.3	194.6	241.4	254.0	263.0	277.5	277.5	281.0
82.5°	28.8	37.9	55.9	63.0	131.5	165.7	176.6	181.9	191.0	191.0	191.0
85°	18.0	23.5	36.0	41.5	79.2	100.9	108.1	109.9	117.1	118.9	118.9
87.5°	9.0	12.6	23.5	25.2	41.5	52.3	52.3	55.9	55.9	54.1	52.3
90°	2.7	4.8	7.0	7.5	11.8	17.5	20.4	18.2	13.6	10.2	10.2
92.5°	10.7	29.0	47.4	51.9	73.0	101.1	115.1	100.9	72.4	51.1	49.1
95°	25.8	59.3	92.8	101.2	179.6	284.3	336.5	300.3	227.9	173.5	167.3
97.5°	44.7	74.2	103.8	111.1	241.9	416.4	503.6	480.7	434.9	400.6	388.8
100°	59.2	85.9	112.7	119.4	264.7	458.2	555.0	556.7	560.0	562.5	548.6
102.5°	71.5	96.5	121.5	127.8	275.0	471.4	569.5	598.7	657.0	700.8	688.8
105°	92.6	113.7	134.8	140.1	282.7	472.8	567.9	633.3	764.1	862.2	855.7
107.5°	114.1	133.8	153.5	158.5	284.2	451.8	535.6	626.8	809.3	946.2	947.7
110°	128.6	146.4	164.2	168.7	282.0	433.2	508.7	610.7	814.6	967.7	974.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	142.9	159.8	176.8	181.0	282.1	416.9	484.3	588.7	797.4	954.0	964.3
115°	164.4	180.0	195.7	199.7	284.7	398.1	454.9	555.5	756.5	907.4	921.6
117.5°	185.6	199.8	214.1	217.7	290.0	386.5	434.8	525.5	707.0	843.1	859.0
120°	198.0	211.4	224.8	228.1	294.3	382.5	426.6	509.5	675.4	799.8	815.2
122.5°	210.1	223.6	237.1	240.5	300.5	380.4	420.4	495.1	644.4	756.4	771.6
125°	228.7	241.0	253.4	256.4	308.9	378.8	413.7	477.1	604.0	699.1	713.1
127.5°	243.7	256.1	268.6	271.7	317.2	377.8	408.1	462.5	571.5	653.1	664.9
130°	251.8	265.2	278.6	281.9	323.3	378.4	405.9	454.5	551.4	624.1	635.0
132.5°	260.2	273.5	286.9	290.3	328.2	378.8	404.1	447.5	534.3	599.4	609.2
135°	272.5	284.7	296.9	299.9	333.6	378.4	400.8	437.2	509.9	564.4	572.8
137.5°	285.2	297.2	309.2	312.3	341.7	380.8	400.3	431.0	492.4	538.5	545.4
140°	295.6	306.7	317.9	320.7	346.6	381.1	398.4	424.9	478.0	517.8	524.3
142.5°	303.7	314.0	324.3	326.9	350.7	382.5	398.4	421.7	468.3	503.3	508.9
145°	316.1	325.1	334.0	336.3	356.1	382.5	395.7	414.8	452.9	481.5	485.7
147.5°	328.5	337.2	345.9	348.1	363.9	385.2	395.7	410.8	440.8	463.2	466.7
150°	336.5	344.4	352.3	354.3	368.1	386.5	395.7	408.4	433.8	452.8	455.5
152.5°	344.9	350.9	356.8	358.3	370.7	387.4	395.7	406.6	428.2	444.4	446.6
155°	357.2	361.6	366.1	367.2	376.7	389.4	395.7	404.3	421.6	434.5	435.9
157.5°	366.4	370.7	375.0	376.1	382.7	391.3	395.7	402.4	415.8	425.8	426.8
160°	372.6	375.9	379.3	380.1	385.3	392.2	395.7	401.5	412.9	421.5	422.1
162.5°	378.8	381.3	383.8	384.4	388.2	393.2	395.7	400.6	410.2	417.5	418.0
165°	385.5	387.8	390.1	390.6	392.3	394.6	395.7	399.2	406.1	411.3	411.8
167.5°	391.7	392.8	393.8	394.1	395.5	397.4	398.4	400.7	405.2	408.6	408.9
170°	395.7	396.8	397.9	398.1	398.2	398.3	398.4	400.7	405.2	408.6	408.6
172.5°	397.9	398.1	398.3	398.4	398.4	398.4	398.4	400.2	403.8	406.5	406.3
175°	400.8	400.8	400.8	400.8	400.0	399.0	398.4	399.6	401.8	403.5	403.5
177.5°	400.8	400.8	400.8	400.8	400.2	399.4	399.0	399.8	401.6	403.0	402.7
180°	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	560.3	560.3
2.5°	598.1	594.5
5°	769.3	772.8
7.5°	1035.9	1034.1
10°	1288.1	1304.3
12.5°	1471.8	1475.4
15°	1583.5	1590.7
17.5°	1626.8	1628.6
20°	1628.6	1625.0
22.5°	1608.7	1605.1
25°	1585.3	1583.5
27.5°	1563.7	1565.5
30°	1554.7	1560.1
32.5°	1554.7	1563.7
35°	1558.3	1567.3
37.5°	1556.5	1567.3
40°	1549.2	1561.9
42.5°	1529.5	1538.5
45°	1498.8	1509.7
47.5°	1459.2	1466.4
50°	1408.8	1415.9
52.5°	1345.7	1347.5
55°	1270.1	1277.3
57.5°	1189.0	1190.8
60°	1098.9	1104.3
62.5°	1003.5	1003.5
65°	902.6	906.1
67.5°	798.1	807.0
70°	691.8	693.6
72.5°	587.3	587.3
75°	479.2	481.0
77.5°	376.5	376.5
80°	279.2	281.0
82.5°	192.8	196.3
85°	120.7	120.7
87.5°	55.9	50.4
90°	10.2	10.2
92.5°	41.0	32.9
95°	142.7	118.1
97.5°	342.0	295.1
100°	492.8	436.9
102.5°	641.0	593.1
105°	830.0	804.3
107.5°	954.0	960.1
110°	1001.1	1027.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1005.3	1046.4
115°	978.7	1035.7
117.5°	922.2	985.4
120°	876.6	938.0
122.5°	832.3	892.9
125°	768.9	824.8
127.5°	712.0	759.1
130°	678.6	722.1
132.5°	648.1	687.1
135°	606.4	640.0
137.5°	572.9	600.5
140°	550.0	575.7
142.5°	531.0	553.1
145°	502.4	519.2
147.5°	480.6	494.5
150°	466.8	478.0
152.5°	455.0	463.5
155°	441.5	447.1
157.5°	430.8	434.8
160°	424.4	426.6
162.5°	420.2	422.3
165°	414.2	416.4
167.5°	409.8	410.8
170°	408.6	408.6
172.5°	405.4	404.6
175°	403.5	403.5
177.5°	401.8	400.8
180°	400.8	400.8



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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	3.99	5.02	4.82	5.89	6.96	17.18	18.22	18.01	19.08	20.15
	3H	4.70	5.64	5.55	6.51	7.61	19.04	19.97	19.88	20.84	21.95
	4H	5.01	5.89	5.87	6.77	7.89	19.69	20.58	20.55	21.46	22.57
	6H	5.27	6.09	6.14	6.97	8.10	20.14	20.95	21.01	21.84	22.97
	8H	5.34	6.12	6.23	7.03	8.15	20.27	21.04	21.15	21.95	23.08
	12H	5.37	6.11	6.26	7.01	8.16	20.34	21.09	21.23	21.98	23.14
4H	2H	11.23	12.12	12.10	12.99	14.11	17.47	18.36	18.34	19.24	20.35
	3H	12.81	13.56	13.69	14.46	15.59	19.54	20.28	20.42	21.19	22.32
	4H	12.92	13.59	13.81	14.50	15.65	20.32	21.00	21.21	21.90	23.06
	6H	12.94	13.52	13.84	14.45	15.61	20.87	21.46	21.78	22.39	23.55
	8H	12.92	13.47	13.83	14.39	15.56	21.04	21.59	21.95	22.52	23.69
	12H	12.88	13.38	13.81	14.32	15.50	21.15	21.64	22.08	22.59	23.76
8H	4H	14.38	14.93	15.29	15.85	17.02	20.39	20.94	21.30	21.87	23.04
	6H	14.63	15.09	15.57	16.05	17.22	21.04	21.49	21.97	22.46	23.63
	8H	14.65	15.05	15.60	16.01	17.20	21.26	21.66	22.21	22.62	23.81
	12H	14.63	14.98	15.58	15.93	17.17	21.42	21.77	22.37	22.72	23.96
12H	4H	14.53	15.03	15.46	15.97	17.15	20.35	20.85	21.28	21.79	22.97
	6H	14.89	15.30	15.84	16.25	17.44	21.02	21.43	21.97	22.38	23.57
	8H	14.97	15.33	15.92	16.28	17.51	21.26	21.62	22.21	22.57	23.81