

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: P936297

Luminaire Tested: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936297
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-B35-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

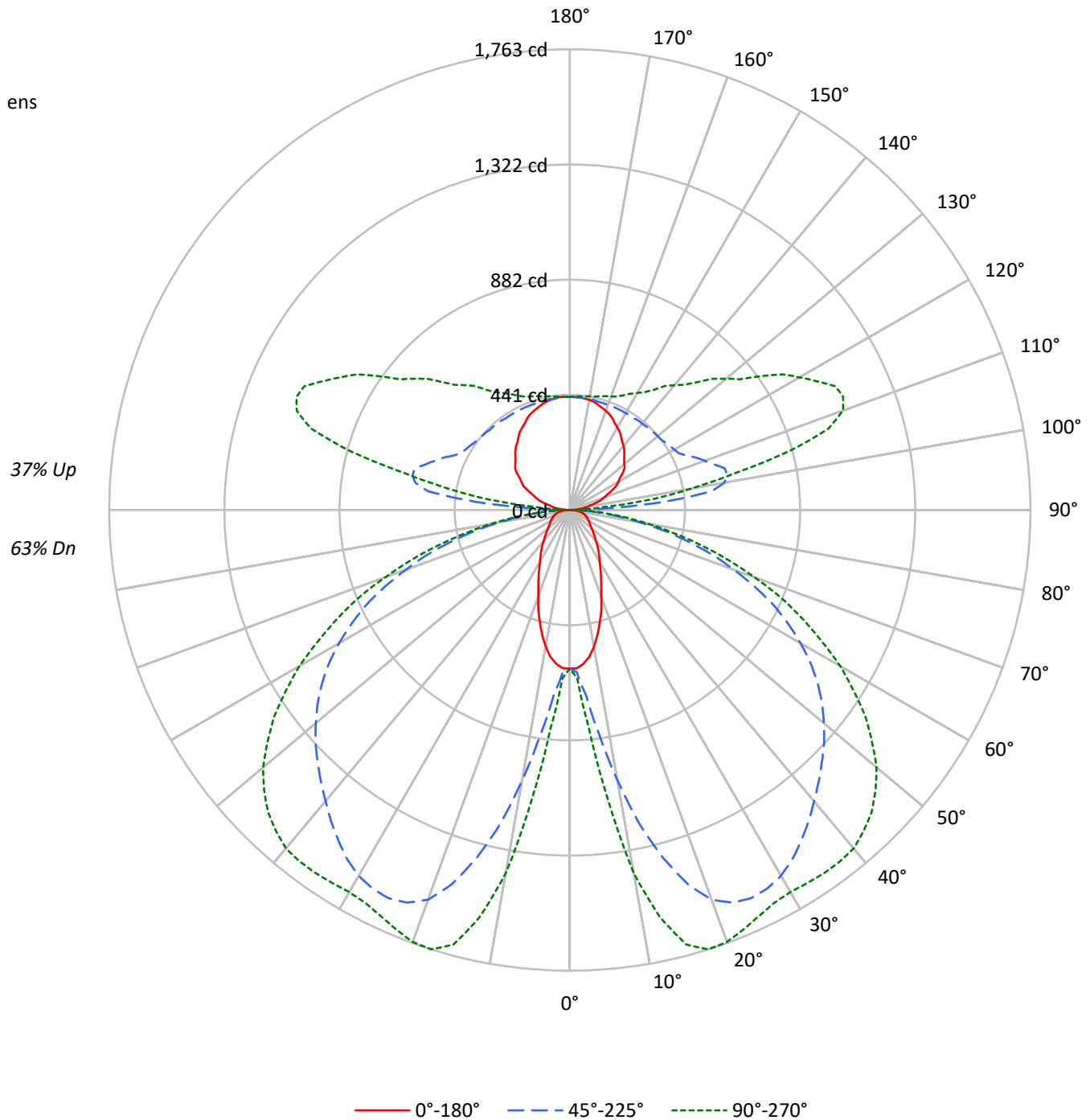
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7504.9 lumens
Efficiency: N/A
Efficacy: 113.7 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





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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°	1876	1876	1876
5°	1833	2168	2521
10°	1663	3161	4179
15°	1414	4132	5047
20°	1152	4789	5143
25°	961	5012	5039
30°	811	5046	5029
35°	717	4963	5159
40°	626	4856	5294
45°	567	4777	5315
50°	520	4707	5227
55°	499	4603	4995
60°	511	4404	4629
65°	533	4099	4126
70°	568	3577	3486
75°	633	2918	2720
80°	697	2027	1833
85°	632	1077	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5315 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	1.0
10°-20°	347.6	4.6
20°-30°	608.1	8.1
30°-40°	782.8	10.4
40°-50°	874.3	11.6
50°-60°	837.4	11.2
60°-70°	663.6	8.8
70°-80°	390.2	5.2
80°-90°	110.1	1.5
90°-100°	211.5	2.8
100°-110°	556.0	7.4
110°-120°	576.5	7.7
120°-130°	462.4	6.2
130°-140°	362.8	4.8
140°-150°	278.5	3.7
150°-160°	200.6	2.7
160°-170°	122.7	1.6
170°-180°	41.5	0.6
0°-30°	1034.2	13.8
0°-40°	1816.9	24.2
0°-60°	3528.6	47.0
0°-90°	4692.6	62.5
90°-120°	1343.9	17.9
90°-150°	2447.6	32.6
90°-180°	2812.0	37.5
0°-180°	7504.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	591	634	714	807	836	55
15°	443	817	1377	1669	1722	123
25°	283	926	1640	1712	1714	130
35°	191	885	1544	1632	1696	119
45°	131	706	1365	1564	1634	101
55°	94	448	1158	1345	1382	85
65°	74	238	860	967	981	73
75°	55	146	472	519	520	57
85°	20	45	117	129	131	21
90°	3	8	22	11	11	4
95°	28	110	364	188	128	31
105°	100	152	615	933	870	106
115°	178	216	492	982	1121	176
125°	248	278	448	757	893	220
135°	295	325	434	611	693	228
145°	342	364	428	521	562	214
155°	387	397	428	470	484	178
165°	417	423	428	445	451	118
175°	434	434	431	437	437	41
180°	434	434	434	434	434	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	606.4	606.4	610.3	612.2	616.1	618.0	622.0	625.9	637.6	639.5	643.4
5°	590.8	598.6	623.9	633.6	661.0	698.0	713.6	739.0	791.6	807.2	817.0
7.5°	567.3	584.9	647.3	662.9	731.2	828.7	869.6	924.2	1008.1	1048.9	1082.1
10°	530.3	567.3	678.5	715.6	826.7	974.9	1050.9	1126.9	1253.7	1310.3	1331.7
12.5°	489.3	549.8	711.6	762.3	922.2	1138.7	1230.3	1314.2	1458.4	1534.5	1546.1
15°	442.6	524.5	742.8	817.0	1023.7	1275.1	1376.6	1479.9	1614.5	1669.0	1682.7
17.5°	401.7	504.9	772.1	850.1	1101.7	1398.0	1501.3	1587.1	1696.3	1733.3	1743.1
20°	351.0	473.8	791.6	893.0	1183.5	1487.7	1587.1	1653.4	1727.5	1750.9	1754.8
22.5°	314.0	440.6	803.3	908.6	1238.1	1542.3	1626.1	1678.8	1729.5	1737.2	1739.2
25°	282.8	403.6	801.4	926.2	1284.9	1575.4	1639.7	1678.8	1708.0	1711.9	1711.9
27.5°	253.5	362.7	793.5	930.0	1320.0	1583.2	1633.9	1661.2	1674.8	1682.7	1682.7
30°	228.1	323.6	774.0	922.2	1335.6	1575.4	1616.4	1630.1	1643.6	1655.3	1661.2
32.5°	208.6	286.6	744.8	906.6	1337.5	1555.9	1585.2	1592.9	1612.4	1639.7	1649.5
35°	191.1	249.6	711.6	885.2	1325.9	1524.7	1544.2	1552.0	1591.0	1632.0	1645.6
37.5°	173.5	222.3	668.8	848.2	1308.2	1487.7	1501.3	1514.9	1575.4	1624.1	1639.7
40°	156.0	198.8	618.0	807.2	1281.0	1442.8	1454.6	1476.0	1555.9	1612.4	1628.0
42.5°	142.3	179.4	563.5	764.3	1245.9	1392.2	1409.7	1440.9	1532.5	1592.9	1610.5
45°	130.6	159.9	504.9	705.8	1201.1	1339.4	1364.8	1407.8	1505.2	1563.7	1579.3
47.5°	118.9	146.2	444.6	645.4	1152.3	1286.8	1320.0	1368.7	1468.1	1524.7	1538.4
50°	109.2	132.6	384.1	581.0	1099.6	1230.3	1269.3	1320.0	1421.4	1474.0	1491.6
52.5°	101.4	120.9	327.5	516.7	1039.3	1171.8	1216.7	1269.3	1364.8	1415.5	1427.2
55°	93.6	111.1	278.8	448.5	976.8	1109.4	1158.1	1208.8	1302.4	1345.4	1353.1
57.5°	89.7	103.3	237.9	384.1	910.6	1039.3	1093.8	1140.6	1228.3	1261.5	1269.3
60°	83.8	97.5	206.7	329.6	838.4	973.0	1019.8	1066.5	1140.6	1167.9	1173.7
62.5°	78.0	93.6	183.2	276.8	764.3	895.0	941.8	984.6	1047.0	1066.5	1074.3
65°	74.1	89.7	165.7	237.9	688.3	813.1	859.9	896.9	947.6	967.1	970.9
67.5°	70.2	85.8	152.0	204.7	612.2	731.2	766.3	801.4	840.3	859.9	861.8
70°	64.3	81.9	140.4	181.3	534.2	637.6	666.9	703.9	735.1	744.8	750.7
72.5°	60.5	76.1	132.6	163.8	454.3	547.9	575.2	596.6	623.9	633.6	633.6
75°	54.6	68.2	124.8	146.2	372.4	448.5	471.8	493.3	514.7	518.6	512.8
77.5°	48.7	60.5	107.3	122.9	290.5	354.8	374.3	386.0	403.6	407.5	409.4
80°	41.0	52.6	83.8	95.5	210.6	261.2	274.9	284.7	300.3	300.3	304.2
82.5°	31.2	41.0	60.5	68.2	142.3	179.4	191.1	196.9	206.7	206.7	206.7
85°	19.5	25.4	39.0	44.9	85.8	109.2	117.0	118.9	126.7	128.7	128.7
87.5°	9.8	13.7	25.4	27.3	44.9	56.6	56.6	60.5	60.5	58.5	56.6
90°	2.9	5.2	7.6	8.1	12.8	19.0	22.1	19.7	14.7	11.0	11.0
92.5°	11.6	31.4	51.3	56.2	79.0	109.4	124.6	109.2	78.4	55.3	53.1
95°	27.9	64.1	100.4	109.5	194.4	307.7	364.2	325.0	246.6	187.8	181.1
97.5°	48.4	80.3	112.3	120.3	261.8	450.7	545.1	520.3	470.7	433.5	420.8
100°	64.1	93.0	122.0	129.3	286.4	495.9	600.7	602.5	606.1	608.8	593.7
102.5°	77.4	104.5	131.5	138.3	297.7	510.2	616.4	648.0	711.1	758.4	745.5
105°	100.2	123.1	145.9	151.6	306.0	511.7	614.6	685.4	826.9	933.1	926.2
107.5°	123.5	144.8	166.2	171.5	307.6	489.0	579.7	678.4	875.9	1024.0	1025.7
110°	139.1	158.4	177.7	182.6	305.2	468.8	550.6	661.0	881.7	1047.3	1054.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	154.7	173.0	191.4	195.9	305.3	451.2	524.1	637.1	863.0	1032.5	1043.6
115°	177.9	194.9	211.8	216.1	308.1	430.9	492.3	601.2	818.8	982.1	997.5
117.5°	200.9	216.3	231.7	235.6	313.9	418.3	470.5	568.8	765.2	912.5	929.7
120°	214.2	228.8	243.3	246.9	318.5	414.0	461.7	551.5	731.0	865.6	882.3
122.5°	227.4	242.1	256.6	260.3	325.2	411.7	455.0	535.9	697.5	818.7	835.1
125°	247.5	260.9	274.2	277.5	334.3	410.0	447.8	516.4	653.7	756.7	771.8
127.5°	263.8	277.2	290.7	294.1	343.3	408.9	441.7	500.6	618.5	706.9	719.7
130°	272.5	287.0	301.6	305.1	349.9	409.5	439.3	491.9	596.8	675.5	687.3
132.5°	281.6	296.0	310.6	314.1	355.2	410.0	437.3	484.3	578.3	648.7	659.3
135°	295.0	308.1	321.3	324.6	361.0	409.6	433.8	473.2	551.8	610.9	620.0
137.5°	308.6	321.7	334.7	338.0	369.8	412.1	433.2	466.5	532.9	582.9	590.3
140°	320.0	332.0	344.1	347.1	375.1	412.5	431.2	459.9	517.3	560.5	567.4
142.5°	328.7	339.8	351.0	353.8	379.6	414.0	431.2	456.4	506.9	544.8	550.8
145°	342.2	351.8	361.5	364.0	385.4	414.0	428.3	448.9	490.2	521.1	525.7
147.5°	355.5	364.9	374.4	376.7	393.9	416.9	428.3	444.6	477.0	501.4	505.1
150°	364.2	372.8	381.3	383.4	398.4	418.3	428.3	442.1	469.5	490.0	493.0
152.5°	373.3	379.8	386.1	387.8	401.3	419.3	428.3	440.0	463.5	481.0	483.3
155°	386.6	391.4	396.2	397.4	407.7	421.4	428.3	437.6	456.3	470.3	471.8
157.5°	396.5	401.2	405.9	407.1	414.2	423.5	428.3	435.6	450.0	460.9	461.9
160°	403.3	406.9	410.6	411.4	417.1	424.5	428.3	434.5	446.9	456.2	456.8
162.5°	410.0	412.7	415.4	416.1	420.2	425.6	428.3	433.5	444.0	451.8	452.4
165°	417.3	419.7	422.2	422.8	424.6	427.0	428.3	432.1	439.5	445.2	445.7
167.5°	423.9	425.1	426.3	426.6	428.1	430.1	431.2	433.6	438.6	442.3	442.5
170°	428.3	429.5	430.6	430.9	431.0	431.1	431.2	433.6	438.6	442.3	442.3
172.5°	430.6	430.9	431.1	431.2	431.2	431.2	431.2	433.1	437.0	439.9	439.7
175°	433.8	433.8	433.8	433.8	432.9	431.8	431.2	432.5	434.9	436.7	436.7
177.5°	433.8	433.8	433.8	433.8	433.1	432.3	431.8	432.8	434.7	436.1	435.9
180°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	606.4	606.4
2.5°	647.3	643.4
5°	832.6	836.4
7.5°	1121.1	1119.2
10°	1394.1	1411.6
12.5°	1592.9	1596.8
15°	1713.9	1721.6
17.5°	1760.7	1762.6
20°	1762.6	1758.7
22.5°	1741.1	1737.2
25°	1715.8	1713.9
27.5°	1692.4	1694.4
30°	1682.7	1688.5
32.5°	1682.7	1692.4
35°	1686.5	1696.3
37.5°	1684.6	1696.3
40°	1676.8	1690.4
42.5°	1655.3	1665.1
45°	1622.2	1633.9
47.5°	1579.3	1587.1
50°	1524.7	1532.5
52.5°	1456.5	1458.4
55°	1374.6	1382.4
57.5°	1286.8	1288.8
60°	1189.4	1195.2
62.5°	1086.1	1086.1
65°	976.8	980.7
67.5°	863.8	873.5
70°	748.7	750.7
72.5°	635.7	635.7
75°	518.6	520.5
77.5°	407.5	407.5
80°	302.2	304.2
82.5°	208.6	212.5
85°	130.6	130.6
87.5°	60.5	54.6
90°	11.0	11.0
92.5°	44.4	35.6
95°	154.5	127.8
97.5°	370.2	319.4
100°	533.3	472.9
102.5°	693.7	642.0
105°	898.4	870.5
107.5°	1032.5	1039.2
110°	1083.5	1112.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1088.1	1132.6
115°	1059.2	1120.9
117.5°	998.1	1066.5
120°	948.7	1015.2
122.5°	900.8	966.4
125°	832.2	892.6
127.5°	770.6	821.6
130°	734.4	781.5
132.5°	701.5	743.6
135°	656.3	692.6
137.5°	620.1	649.9
140°	595.3	623.1
142.5°	574.7	598.6
145°	543.8	561.9
147.5°	520.2	535.2
150°	505.2	517.3
152.5°	492.4	501.7
155°	477.8	483.9
157.5°	466.3	470.5
160°	459.3	461.7
162.5°	454.8	457.1
165°	448.3	450.7
167.5°	443.5	444.6
170°	442.3	442.3
172.5°	438.8	437.9
175°	436.7	436.7
177.5°	434.9	433.8
180°	433.8	433.8



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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	4.26	5.30	5.09	6.16	7.24	17.45	18.49	18.29	19.35	20.43
	3H	4.98	5.91	5.82	6.79	7.89	19.31	20.25	20.16	21.12	22.22
	4H	5.29	6.17	6.15	7.05	8.16	19.97	20.85	20.83	21.73	22.84
	6H	5.55	6.36	6.42	7.25	8.38	20.41	21.23	21.29	22.11	23.24
	8H	5.62	6.40	6.50	7.30	8.43	20.54	21.32	21.42	22.22	23.35
	12H	5.64	6.39	6.53	7.28	8.44	20.62	21.36	21.51	22.26	23.41
4H	2H	11.51	12.39	12.37	13.27	14.38	17.75	18.63	18.61	19.51	20.62
	3H	13.09	13.83	13.97	14.74	15.87	19.81	20.56	20.69	21.47	22.60
	4H	13.19	13.87	14.08	14.77	15.93	20.59	21.27	21.48	22.18	23.33
	6H	13.21	13.80	14.12	14.73	15.89	21.15	21.73	22.05	22.66	23.82
	8H	13.19	13.74	14.10	14.67	15.84	21.32	21.87	22.22	22.79	23.96
	12H	13.16	13.65	14.09	14.60	15.78	21.42	21.92	22.35	22.86	24.04
8H	4H	14.65	15.20	15.56	16.13	17.30	20.67	21.22	21.58	22.14	23.31
	6H	14.90	15.36	15.84	16.33	17.50	21.31	21.77	22.25	22.73	23.90
	8H	14.92	15.33	15.87	16.29	17.47	21.54	21.94	22.48	22.90	24.08
	12H	14.90	15.26	15.85	16.21	17.45	21.69	22.05	22.64	23.00	24.24
12H	4H	14.81	15.30	15.74	16.25	17.42	20.63	21.13	21.56	22.07	23.25
	6H	15.17	15.57	16.11	16.53	17.72	21.30	21.70	22.24	22.66	23.85
	8H	15.25	15.60	16.19	16.55	17.79	21.54	21.89	22.49	22.84	24.08