

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: P936301

Luminaire Tested: SQ4-FB-025U-050D-B40-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

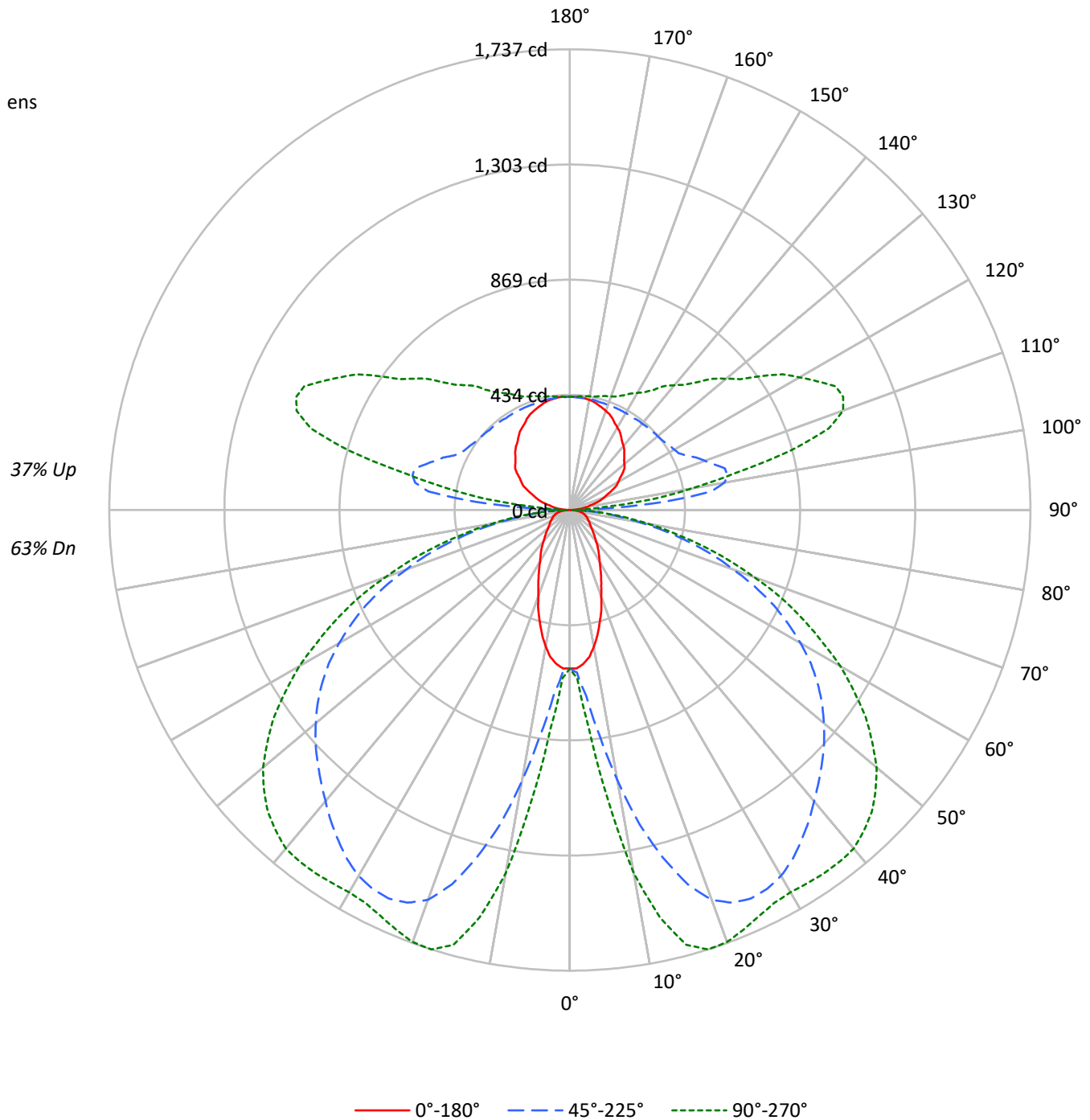
Test Method: LM-79-2019  
Report Number: P936301  
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-B40-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7396.5 lumens  
Efficiency: N/A  
Efficacy: 112.1 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 (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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1848	1848	1848
5°	1807	2137	2485
10°	1639	3116	4119
15°	1394	4072	4974
20°	1135	4720	5069
25°	947	4940	4966
30°	799	4973	4957
35°	707	4891	5085
40°	617	4786	5217
45°	558	4708	5238
50°	513	4639	5151
55°	492	4537	4923
60°	504	4340	4562
65°	526	4039	4067
70°	561	3525	3436
75°	624	2876	2681
80°	687	1997	1807
85°	622	1062	924

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5238 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	1.0
10°-20°	342.6	4.6
20°-30°	599.3	8.1
30°-40°	771.5	10.4
40°-50°	861.7	11.6
50°-60°	825.3	11.2
60°-70°	654.1	8.8
70°-80°	384.6	5.2
80°-90°	108.5	1.5
90°-100°	208.4	2.8
100°-110°	547.9	7.4
110°-120°	568.1	7.7
120°-130°	455.7	6.2
130°-140°	357.6	4.8
140°-150°	274.5	3.7
150°-160°	197.7	2.7
160°-170°	120.9	1.6
170°-180°	40.9	0.6
0°-30°	1019.2	13.8
0°-40°	1790.7	24.2
0°-60°	3477.7	47.0
0°-90°	4624.8	62.5
90°-120°	1324.5	17.9
90°-150°	2412.2	32.6
90°-180°	2772.0	37.5
0°-180°	7396.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	582	624	703	796	824	54
15°	436	805	1357	1645	1697	121
25°	279	913	1616	1687	1689	128
35°	188	872	1522	1608	1672	118
45°	129	696	1345	1541	1610	100
55°	92	442	1141	1326	1362	84
65°	73	234	848	953	967	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	3	8	22	11	11	4
95°	28	108	359	185	126	31
105°	99	150	606	920	858	105
115°	175	213	485	968	1105	173
125°	244	274	441	746	880	217
135°	291	320	428	602	683	225
145°	337	359	422	514	554	211
155°	381	392	422	464	477	175
165°	411	417	422	439	444	116
175°	428	428	425	430	430	41
180°	428	428	428	428	428	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6
2.5°	597.6	597.6	601.5	603.4	607.2	609.1	613.0	616.8	628.4	630.3	634.1
5°	582.3	589.9	614.9	624.5	651.4	687.9	703.3	728.3	780.1	795.5	805.2
7.5°	559.2	576.4	637.9	653.3	720.6	816.7	857.0	910.9	993.5	1033.8	1066.4
10°	522.7	559.2	668.7	705.3	814.7	960.8	1035.7	1110.7	1235.6	1291.4	1312.5
12.5°	482.3	541.9	701.4	751.3	908.9	1122.2	1212.6	1295.2	1437.4	1512.3	1523.8
15°	436.2	516.9	732.1	805.2	1008.9	1256.7	1356.7	1458.5	1591.1	1644.9	1658.4
17.5°	395.8	497.7	760.9	837.8	1085.7	1377.8	1479.6	1564.2	1671.8	1708.3	1717.9
20°	345.9	467.0	780.1	880.1	1166.4	1466.2	1564.2	1629.5	1702.6	1725.6	1729.4
22.5°	309.4	434.2	791.7	895.5	1220.2	1520.0	1602.6	1654.5	1704.5	1712.1	1714.0
25°	278.7	397.8	789.8	912.8	1266.3	1552.6	1616.1	1654.5	1683.3	1687.2	1687.2
27.5°	249.8	357.5	782.0	916.6	1300.9	1560.4	1610.3	1637.2	1650.6	1658.4	1658.4
30°	224.8	319.0	762.9	908.9	1316.3	1552.6	1593.0	1606.5	1619.9	1631.4	1637.2
32.5°	205.6	282.5	734.0	893.5	1318.2	1533.4	1562.3	1569.9	1589.1	1616.1	1625.7
35°	188.3	246.0	701.4	872.4	1306.7	1502.7	1521.9	1529.6	1568.0	1608.4	1621.8
37.5°	171.0	219.1	659.1	835.9	1289.3	1466.2	1479.6	1493.0	1552.6	1600.7	1616.1
40°	153.8	196.0	609.1	795.5	1262.5	1422.0	1433.6	1454.7	1533.4	1589.1	1604.5
42.5°	140.3	176.8	555.3	753.3	1227.9	1372.0	1389.3	1420.1	1510.3	1569.9	1587.2
45°	128.7	157.6	497.7	695.6	1183.7	1320.1	1345.1	1387.4	1483.5	1541.1	1556.5
47.5°	117.2	144.1	438.2	636.0	1135.7	1268.2	1300.9	1348.9	1446.9	1502.7	1516.2
50°	107.6	130.6	378.6	572.6	1083.7	1212.6	1251.0	1300.9	1400.9	1452.7	1470.0
52.5°	99.9	119.2	322.8	509.2	1024.2	1154.9	1199.1	1251.0	1345.1	1395.1	1406.6
55°	92.3	109.5	274.8	442.0	962.7	1093.4	1141.4	1191.4	1283.6	1325.9	1333.6
57.5°	88.4	101.8	234.5	378.6	897.4	1024.2	1078.0	1124.1	1210.6	1243.3	1251.0
60°	82.6	96.1	203.7	324.8	826.3	958.9	1005.0	1051.1	1124.1	1151.1	1156.8
62.5°	76.9	92.3	180.6	272.8	753.3	882.0	928.2	970.4	1031.9	1051.1	1058.8
65°	73.1	88.4	163.3	234.5	678.3	801.3	847.5	883.9	933.9	953.1	956.9
67.5°	69.1	84.5	149.8	201.8	603.4	720.6	755.2	789.8	828.2	847.5	849.4
70°	63.4	80.7	138.4	178.7	526.5	628.4	657.2	693.7	724.5	734.0	739.8
72.5°	59.6	75.0	130.6	161.4	447.7	540.0	566.9	588.0	614.9	624.5	624.5
75°	53.8	67.2	123.0	144.1	367.0	442.0	465.0	486.2	507.3	511.1	505.4
77.5°	48.0	59.6	105.7	121.1	286.3	349.7	368.9	380.5	397.8	401.6	403.5
80°	40.4	51.9	82.6	94.2	207.5	257.5	270.9	280.6	296.0	296.0	299.8
82.5°	30.8	40.4	59.6	67.2	140.3	176.8	188.3	194.1	203.7	203.7	203.7
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.3	117.2	124.9	126.8	126.8
87.5°	9.6	13.5	25.0	26.9	44.2	55.8	55.8	59.6	59.6	57.7	55.8
90°	2.9	5.2	7.4	8.0	12.6	18.7	21.8	19.4	14.5	10.9	10.9
92.5°	11.5	30.9	50.5	55.4	77.8	107.8	122.8	107.6	77.3	54.5	52.3
95°	27.5	63.2	98.9	107.9	191.6	303.2	359.0	320.3	243.0	185.1	178.5
97.5°	47.7	79.2	110.7	118.5	258.0	444.2	537.2	512.7	463.9	427.3	414.8
100°	63.1	91.7	120.2	127.4	282.3	488.8	592.0	593.8	597.4	600.0	585.1
102.5°	76.3	102.9	129.6	136.3	293.4	502.8	607.5	638.6	700.8	747.5	734.7
105°	98.7	121.3	143.8	149.5	301.6	504.3	605.8	675.5	815.0	919.7	912.8
107.5°	121.7	142.7	163.8	169.0	303.1	481.9	571.3	668.6	863.2	1009.2	1010.9
110°	137.1	156.1	175.1	179.9	300.8	462.0	542.6	651.4	869.0	1032.2	1039.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	152.4	170.5	188.6	193.1	300.9	444.6	516.6	627.9	850.5	1017.6	1028.5
115°	175.3	192.1	208.8	213.0	303.7	424.7	485.2	592.5	807.0	967.9	983.1
117.5°	198.0	213.2	228.3	232.2	309.3	412.3	463.7	560.6	754.2	899.3	916.2
120°	211.2	225.5	239.8	243.3	313.9	408.0	455.1	543.5	720.5	853.1	869.5
122.5°	224.1	238.6	252.9	256.5	320.5	405.8	448.5	528.1	687.4	806.9	823.0
125°	243.9	257.1	270.3	273.5	329.5	404.1	441.3	508.9	644.2	745.8	760.7
127.5°	260.0	273.2	286.5	289.8	338.4	403.0	435.3	493.4	609.6	696.7	709.3
130°	268.5	282.9	297.2	300.7	344.9	403.6	433.0	484.8	588.2	665.7	677.4
132.5°	277.5	291.8	306.1	309.6	350.1	404.1	431.0	477.3	569.9	639.4	649.8
135°	290.7	303.7	316.7	319.9	355.8	403.7	427.6	466.3	543.9	602.0	611.0
137.5°	304.2	317.1	329.9	333.1	364.4	406.2	427.0	459.7	525.2	574.4	581.8
140°	315.3	327.2	339.1	342.1	369.7	406.5	425.0	453.2	509.9	552.4	559.2
142.5°	323.9	334.9	345.9	348.7	374.1	408.0	425.0	449.8	499.6	536.9	542.8
145°	337.2	346.8	356.3	358.7	379.8	408.0	422.1	442.5	483.1	513.6	518.1
147.5°	350.4	359.7	369.0	371.3	388.2	410.8	422.1	438.2	470.1	494.1	497.8
150°	359.0	367.4	375.8	377.9	392.6	412.3	422.1	435.7	462.7	482.9	485.9
152.5°	367.9	374.3	380.6	382.2	395.5	413.2	422.1	433.7	456.8	474.1	476.4
155°	381.0	385.7	390.5	391.6	401.8	415.3	422.1	431.3	449.7	463.5	465.0
157.5°	390.8	395.4	400.0	401.2	408.2	417.4	422.1	429.3	443.5	454.2	455.2
160°	397.5	401.0	404.6	405.5	411.0	418.4	422.1	428.2	440.4	449.6	450.2
162.5°	404.1	406.7	409.4	410.1	414.1	419.4	422.1	427.3	437.6	445.3	445.9
165°	411.2	413.6	416.1	416.7	418.5	420.9	422.1	425.8	433.2	438.7	439.3
167.5°	417.8	419.0	420.1	420.4	421.9	423.9	425.0	427.4	432.2	435.9	436.1
170°	422.1	423.3	424.4	424.7	424.8	424.9	425.0	427.4	432.2	435.9	435.9
172.5°	424.4	424.7	424.9	425.0	425.0	425.0	425.0	426.9	430.7	433.6	433.4
175°	427.6	427.6	427.6	427.6	426.7	425.5	425.0	426.2	428.6	430.4	430.4
177.5°	427.6	427.6	427.6	427.6	426.9	426.0	425.5	426.5	428.4	429.8	429.6
180°	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	597.6	597.6
2.5°	637.9	634.1
5°	820.5	824.4
7.5°	1104.9	1103.0
10°	1374.0	1391.2
12.5°	1569.9	1573.7
15°	1689.1	1696.7
17.5°	1735.2	1737.1
20°	1737.1	1733.3
22.5°	1715.9	1712.1
25°	1691.0	1689.1
27.5°	1667.9	1669.9
30°	1658.4	1664.1
32.5°	1658.4	1667.9
35°	1662.2	1671.8
37.5°	1660.3	1671.8
40°	1652.5	1666.0
42.5°	1631.4	1641.1
45°	1598.8	1610.3
47.5°	1556.5	1564.2
50°	1502.7	1510.3
52.5°	1435.5	1437.4
55°	1354.8	1362.4
57.5°	1268.2	1270.1
60°	1172.2	1177.9
62.5°	1070.4	1070.4
65°	962.7	966.6
67.5°	851.3	860.8
70°	737.9	739.8
72.5°	626.5	626.5
75°	511.1	513.0
77.5°	401.6	401.6
80°	297.9	299.8
82.5°	205.6	209.4
85°	128.7	128.7
87.5°	59.6	53.8
90°	10.9	10.9
92.5°	43.7	35.0
95°	152.2	126.0
97.5°	364.8	314.8
100°	525.6	466.0
102.5°	683.7	632.7
105°	885.4	858.0
107.5°	1017.6	1024.1
110°	1067.9	1096.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1072.4	1116.2
115°	1043.9	1104.7
117.5°	983.6	1051.1
120°	935.0	1000.6
122.5°	887.8	952.4
125°	820.2	879.7
127.5°	759.5	809.7
130°	723.8	770.2
132.5°	691.3	732.9
135°	646.8	682.6
137.5°	611.1	640.5
140°	586.7	614.1
142.5°	566.4	590.0
145°	535.9	553.8
147.5°	512.6	527.4
150°	497.9	509.9
152.5°	485.3	494.4
155°	470.9	476.9
157.5°	459.5	463.7
160°	452.7	455.1
162.5°	448.2	450.5
165°	441.8	444.2
167.5°	437.1	438.2
170°	435.9	435.9
172.5°	432.4	431.6
175°	430.4	430.4
177.5°	428.6	427.6
180°	427.6	427.6



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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	4.21	5.25	5.04	6.11	7.19	17.40	18.44	18.23	19.30	20.38
	3H	4.93	5.86	5.77	6.73	7.84	19.26	20.19	20.10	21.07	22.17
	4H	5.23	6.12	6.10	7.00	8.11	19.92	20.80	20.78	21.68	22.79
	6H	5.49	6.31	6.37	7.20	8.32	20.36	21.18	21.24	22.06	23.19
	8H	5.57	6.35	6.45	7.25	8.38	20.49	21.27	21.37	22.17	23.30
	12H	5.59	6.33	6.48	7.23	8.39	20.57	21.31	21.46	22.21	23.36
4H	2H	11.46	12.34	12.32	13.22	14.33	17.70	18.58	18.56	19.46	20.57
	3H	13.04	13.78	13.92	14.69	15.82	19.76	20.51	20.64	21.42	22.55
	4H	13.14	13.82	14.03	14.72	15.88	20.54	21.22	21.43	22.13	23.28
	6H	13.16	13.75	14.07	14.68	15.84	21.10	21.68	22.00	22.61	23.77
	8H	13.14	13.69	14.05	14.62	15.79	21.27	21.81	22.17	22.74	23.91
	12H	13.11	13.60	14.04	14.55	15.72	21.37	21.87	22.30	22.81	23.99
8H	4H	14.60	15.15	15.51	16.08	17.25	20.62	21.17	21.53	22.09	23.26
	6H	14.85	15.31	15.79	16.28	17.45	21.26	21.72	22.20	22.68	23.85
	8H	14.87	15.28	15.82	16.24	17.42	21.48	21.89	22.43	22.85	24.03
	12H	14.85	15.21	15.80	16.16	17.40	21.64	22.00	22.59	22.95	24.18
12H	4H	14.76	15.25	15.69	16.20	17.37	20.58	21.08	21.51	22.02	23.20
	6H	15.12	15.52	16.06	16.48	17.67	21.24	21.65	22.19	22.61	23.79
	8H	15.19	15.55	16.14	16.50	17.74	21.49	21.84	22.44	22.79	24.03