

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: P936404

Luminaire Tested: SQ4-FB-025U-075D-B40-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936404
REPORT IS A COMBINATION OF REPORTS P933454 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-B40-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

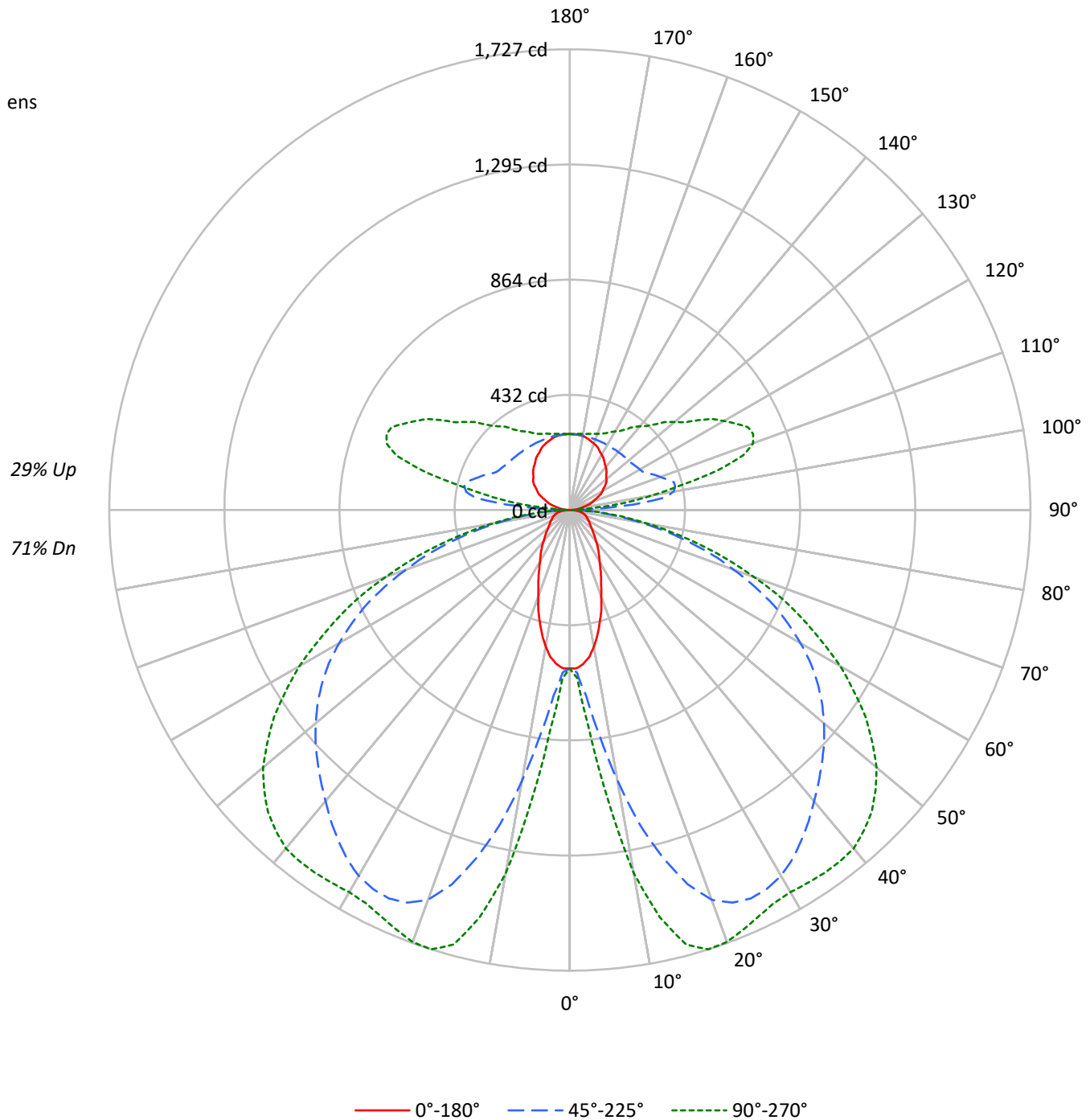
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6444.3 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	71
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	62	62	62	58
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	51	51	51	48
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	43	43	43	39
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	36	36	36	33
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	31	31	31	28
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	27	27	27	24
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	23	23	23	21
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	21	21	21	18
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	18	18	18	16
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	16	16	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2692	3186	3704
10°	2442	4643	6142
15°	2076	6067	7416
20°	1690	7030	7558
25°	1410	7357	7405
30°	1189	7403	7391
35°	1051	7280	7582
40°	916	7121	7779
45°	829	7004	7810
50°	761	6898	7681
55°	729	6744	7340
60°	746	6447	6802
65°	776	5997	6063
70°	826	5230	5123
75°	916	4264	3998
80°	1000	2957	2694
85°	890	1569	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7810 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	1.2
10°-20°	340.6	5.3
20°-30°	595.7	9.2
30°-40°	766.8	11.9
40°-50°	856.5	13.3
50°-60°	820.4	12.7
60°-70°	650.1	10.1
70°-80°	382.3	5.9
80°-90°	107.3	1.7
90°-100°	138.9	2.2
100°-110°	365.3	5.7
110°-120°	378.8	5.9
120°-130°	303.8	4.7
130°-140°	238.4	3.7
140°-150°	183.0	2.8
150°-160°	131.8	2.0
160°-170°	80.6	1.3
170°-180°	27.2	0.4
0°-30°	1013.1	15.7
0°-40°	1780.0	27.6
0°-60°	3456.9	53.6
0°-90°	4596.5	71.3
90°-120°	883.0	13.7
90°-150°	1608.2	25.0
90°-180°	1848.0	28.7
0°-180°	6444.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	579	621	699	791	819	53
15°	434	800	1349	1635	1687	121
25°	277	907	1606	1677	1679	128
35°	187	867	1513	1599	1662	117
45°	128	691	1337	1532	1601	99
55°	92	439	1135	1318	1354	84
65°	73	233	842	947	961	72
75°	54	143	462	508	510	56
85°	19	44	115	126	128	20
90°	2	5	14	7	7	3
95°	18	72	239	123	84	20
105°	66	100	404	613	572	70
115°	117	142	324	645	736	115
125°	163	182	294	497	587	144
135°	194	213	285	401	455	150
145°	225	239	281	342	369	141
155°	254	261	281	309	318	117
165°	274	278	281	292	296	77
175°	285	285	283	287	287	27
180°	285	285	285	285	285	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0
2.5°	594.0	594.0	597.8	599.7	603.6	605.5	609.3	613.1	624.6	626.5	630.3
5°	578.7	586.4	611.2	620.8	647.5	683.8	699.1	723.9	775.5	790.7	800.3
7.5°	555.8	573.0	634.1	649.4	716.2	811.8	851.9	905.3	987.5	1027.6	1060.0
10°	519.5	555.8	664.7	701.0	809.8	955.0	1029.5	1104.1	1228.2	1283.6	1304.6
12.5°	479.4	538.6	697.2	746.8	903.4	1115.5	1205.3	1287.4	1428.8	1503.3	1514.7
15°	433.6	513.8	727.7	800.3	1002.8	1249.2	1348.6	1449.8	1581.6	1635.1	1648.4
17.5°	393.5	494.7	756.4	832.8	1079.1	1369.6	1470.8	1554.8	1661.8	1698.1	1707.6
20°	343.8	464.1	775.5	874.8	1159.5	1457.4	1554.8	1619.8	1692.4	1715.3	1719.1
22.5°	307.5	431.7	786.9	890.1	1212.9	1510.9	1593.0	1644.6	1694.3	1701.9	1703.8
25°	277.0	395.4	785.0	907.2	1258.8	1543.4	1606.4	1644.6	1673.3	1677.1	1677.1
27.5°	248.3	355.3	777.4	911.1	1293.2	1551.0	1600.7	1627.4	1640.8	1648.4	1648.4
30°	223.5	317.1	758.3	903.4	1308.4	1543.4	1583.5	1596.9	1610.2	1621.7	1627.4
32.5°	204.4	280.8	729.6	888.2	1310.4	1524.3	1552.9	1560.6	1579.7	1606.4	1616.0
35°	187.2	244.5	697.2	867.1	1298.9	1493.7	1512.8	1520.5	1558.7	1598.8	1612.1
37.5°	170.0	217.7	655.1	830.8	1281.7	1457.4	1470.8	1484.2	1543.4	1591.1	1606.4
40°	152.8	194.8	605.5	790.7	1255.0	1413.5	1425.0	1446.0	1524.3	1579.7	1594.9
42.5°	139.4	175.7	552.0	748.7	1220.6	1363.8	1381.0	1411.6	1501.4	1560.6	1577.8
45°	128.0	156.6	494.7	691.4	1176.7	1312.3	1337.1	1379.1	1474.6	1531.9	1547.2
47.5°	116.5	143.2	435.5	632.2	1128.9	1260.7	1293.2	1340.9	1438.3	1493.7	1507.1
50°	107.0	129.9	376.3	569.2	1077.2	1205.3	1243.5	1293.2	1392.5	1444.1	1461.2
52.5°	99.3	118.4	320.9	506.2	1018.0	1148.0	1191.9	1243.5	1337.1	1386.8	1398.2
55°	91.7	108.9	273.1	439.3	956.9	1086.9	1134.6	1184.3	1276.0	1318.0	1325.6
57.5°	87.9	101.2	233.0	376.3	892.0	1018.0	1071.5	1117.4	1203.4	1235.9	1243.5
60°	82.1	95.5	202.5	322.8	821.3	953.1	998.9	1044.8	1117.4	1144.2	1149.9
62.5°	76.4	91.7	179.5	271.2	748.7	876.7	922.5	964.6	1025.7	1044.8	1052.4
65°	72.6	87.9	162.4	233.0	674.2	796.5	842.3	878.6	928.3	947.4	951.2
67.5°	68.8	84.0	149.0	200.5	599.7	716.2	750.6	785.0	823.2	842.3	844.2
70°	63.0	80.2	137.5	177.6	523.3	624.6	653.2	689.5	720.1	729.6	735.4
72.5°	59.2	74.5	129.9	160.4	445.0	536.7	563.4	584.5	611.2	620.8	620.8
75°	53.5	66.8	122.2	143.2	364.8	439.3	462.2	483.2	504.2	508.1	502.3
77.5°	47.8	59.2	105.0	120.3	284.6	347.6	366.7	378.2	395.4	399.2	401.1
80°	40.1	51.6	82.1	93.6	206.3	255.9	269.3	278.9	294.1	294.1	298.0
82.5°	30.6	40.1	59.2	66.8	139.4	175.7	187.2	192.9	202.5	202.5	202.5
85°	19.1	24.8	38.2	43.9	84.0	107.0	114.6	116.5	124.2	126.1	126.1
87.5°	9.5	13.4	24.8	26.7	43.9	55.4	55.4	59.2	59.2	57.3	55.4
90°	1.9	3.4	5.0	5.3	8.4	12.5	14.5	12.9	9.6	7.3	7.3
92.5°	7.6	20.6	33.7	37.0	52.0	71.9	81.8	71.7	51.6	36.4	35.0
95°	18.3	42.1	66.0	71.9	127.7	202.1	239.3	213.5	162.1	123.4	119.0
97.5°	31.8	52.8	73.7	79.0	172.0	296.0	358.1	341.9	309.3	284.9	276.6
100°	42.1	61.1	80.1	84.9	188.1	325.8	394.6	395.8	398.2	400.0	390.1
102.5°	50.9	68.7	86.4	90.8	195.6	335.2	405.0	425.7	467.2	498.3	489.8
105°	65.8	80.9	96.0	99.7	201.1	336.3	403.9	450.4	543.4	613.1	608.5
107.5°	81.1	95.1	109.2	112.7	202.1	321.3	380.9	445.7	575.5	672.8	673.9
110°	91.5	104.1	116.8	119.9	200.5	308.0	361.8	434.2	579.3	688.1	692.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	101.6	113.6	125.7	128.7	200.6	296.4	344.4	418.6	567.0	678.3	685.7
115°	116.9	128.0	139.1	141.9	202.5	283.2	323.5	395.0	538.0	645.3	655.4
117.5°	132.0	142.1	152.2	154.8	206.3	274.8	309.1	373.7	502.7	599.5	610.8
120°	140.8	150.3	159.9	162.3	209.3	272.1	303.4	362.3	480.3	568.7	579.6
122.5°	149.4	159.0	168.7	171.0	213.7	270.6	299.0	352.1	458.3	538.0	548.7
125°	162.6	171.4	180.1	182.3	219.6	269.4	294.2	339.3	429.6	497.2	507.1
127.5°	173.3	182.1	191.0	193.2	225.6	268.6	290.2	329.0	406.4	464.5	472.9
130°	179.1	188.6	198.1	200.5	229.9	269.1	288.7	323.2	392.1	443.8	451.5
132.5°	185.0	194.5	204.0	206.4	233.4	269.4	287.4	318.2	379.9	426.2	433.2
135°	193.8	202.5	211.2	213.3	237.2	269.1	285.1	310.9	362.6	401.4	407.3
137.5°	202.7	211.3	219.9	222.1	243.0	270.7	284.7	306.6	350.2	383.0	387.8
140°	210.2	218.1	226.0	228.1	246.5	271.0	283.3	302.3	340.0	368.2	372.8
142.5°	216.0	223.3	230.6	232.4	249.4	272.1	283.3	300.0	333.1	357.9	361.8
145°	224.8	231.2	237.5	239.1	253.3	272.1	281.4	295.0	322.1	342.5	345.4
147.5°	233.6	239.8	246.0	247.5	258.8	273.9	281.4	292.1	313.4	329.4	331.9
150°	239.3	245.0	250.5	251.9	261.8	274.8	281.4	290.4	308.5	321.9	323.9
152.5°	245.2	249.4	253.7	254.8	263.7	275.5	281.4	289.1	304.5	316.0	317.5
155°	254.0	257.2	260.3	261.1	267.9	277.0	281.4	287.6	299.8	308.9	309.9
157.5°	260.5	263.6	266.6	267.4	272.1	278.3	281.4	286.2	295.7	302.8	303.5
160°	264.9	267.3	269.7	270.3	274.0	279.0	281.4	285.5	293.7	299.8	300.2
162.5°	269.3	271.1	272.8	273.3	276.0	279.6	281.4	284.9	291.8	296.9	297.3
165°	274.2	275.8	277.4	277.8	279.1	280.7	281.4	283.9	288.8	292.5	292.9
167.5°	278.6	279.3	280.1	280.3	281.3	282.7	283.3	285.0	288.2	290.6	290.8
170°	281.4	282.2	283.0	283.2	283.3	283.3	283.3	285.0	288.2	290.6	290.6
172.5°	283.0	283.2	283.3	283.3	283.3	283.3	283.3	284.6	287.2	289.1	288.9
175°	285.1	285.1	285.1	285.1	284.5	283.7	283.3	284.1	285.7	287.0	287.0
177.5°	285.1	285.1	285.1	285.1	284.6	284.0	283.7	284.4	285.6	286.6	286.4
180°	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	594.0	594.0
2.5°	634.1	630.3
5°	815.6	819.4
7.5°	1098.3	1096.4
10°	1365.7	1382.9
12.5°	1560.6	1564.4
15°	1679.0	1686.6
17.5°	1724.8	1726.7
20°	1726.7	1722.9
22.5°	1705.7	1701.9
25°	1680.9	1679.0
27.5°	1658.0	1659.9
30°	1648.4	1654.2
32.5°	1648.4	1658.0
35°	1652.2	1661.8
37.5°	1650.3	1661.8
40°	1642.7	1656.1
42.5°	1621.7	1631.2
45°	1589.2	1600.7
47.5°	1547.2	1554.8
50°	1493.7	1501.4
52.5°	1426.9	1428.8
55°	1346.6	1354.3
57.5°	1260.7	1262.6
60°	1165.2	1170.9
62.5°	1063.9	1063.9
65°	956.9	960.7
67.5°	846.1	855.7
70°	733.4	735.4
72.5°	622.7	622.7
75°	508.1	510.0
77.5°	399.2	399.2
80°	296.0	298.0
82.5°	204.4	208.2
85°	128.0	128.0
87.5°	59.2	53.5
90°	7.3	7.3
92.5°	29.1	23.3
95°	101.5	83.9
97.5°	243.1	209.8
100°	350.4	310.7
102.5°	455.8	421.8
105°	590.3	571.9
107.5°	678.3	682.7
110°	711.9	731.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	714.9	744.1
115°	696.0	736.5
117.5°	655.8	700.8
120°	623.3	667.1
122.5°	591.8	634.9
125°	546.8	586.6
127.5°	506.3	539.9
130°	482.5	513.4
132.5°	460.9	488.6
135°	431.2	455.1
137.5°	407.4	427.0
140°	391.1	409.4
142.5°	377.6	393.3
145°	357.4	369.2
147.5°	341.7	351.6
150°	332.0	340.0
152.5°	323.6	329.6
155°	313.9	317.9
157.5°	306.4	309.1
160°	301.8	303.4
162.5°	298.8	300.3
165°	294.5	296.1
167.5°	291.5	292.1
170°	290.6	290.6
172.5°	288.3	287.7
175°	287.0	287.0
177.5°	285.7	285.1
180°	285.1	285.1



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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	6.27	7.42	7.01	8.19	9.12	19.45	20.60	20.19	21.37	22.30
	3H	6.99	8.03	7.75	8.81	9.77	21.31	22.35	22.06	23.13	24.08
	4H	7.30	8.29	8.08	9.08	10.05	21.97	22.95	22.74	23.74	24.71
	6H	7.57	8.48	8.36	9.28	10.26	22.41	23.32	23.20	24.12	25.10
	8H	7.65	8.52	8.44	9.33	10.32	22.54	23.41	23.34	24.23	25.21
	12H	7.68	8.50	8.48	9.32	10.33	22.62	23.45	23.42	24.26	25.27
4H	2H	13.52	14.50	14.29	15.29	16.26	19.76	20.74	20.53	21.53	22.50
	3H	15.11	15.94	15.90	16.76	17.75	21.83	22.65	22.62	23.48	24.46
	4H	15.22	15.97	16.02	16.79	17.81	22.61	23.36	23.41	24.18	25.20
	6H	15.25	15.90	16.07	16.75	17.77	23.16	23.82	23.98	24.66	25.68
	8H	15.23	15.84	16.06	16.69	17.72	23.33	23.95	24.16	24.79	25.82
	12H	15.20	15.76	16.05	16.62	17.66	23.44	23.99	24.29	24.86	25.90
8H	4H	16.69	17.30	17.51	18.14	19.18	22.69	23.30	23.52	24.15	25.18
	6H	16.94	17.45	17.80	18.34	19.37	23.34	23.85	24.19	24.73	25.76
	8H	16.97	17.42	17.83	18.30	19.35	23.56	24.01	24.42	24.89	25.94
	12H	16.95	17.35	17.82	18.22	19.32	23.72	24.12	24.59	24.99	26.09
12H	4H	16.85	17.40	17.69	18.26	19.30	22.66	23.21	23.51	24.08	25.11
	6H	17.21	17.66	18.07	18.54	19.59	23.32	23.78	24.19	24.66	25.70
	8H	17.29	17.69	18.16	18.56	19.66	23.57	23.97	24.44	24.84	25.94