

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: P936401

Luminaire Tested: SQ4-FB-025U-075D-B40-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

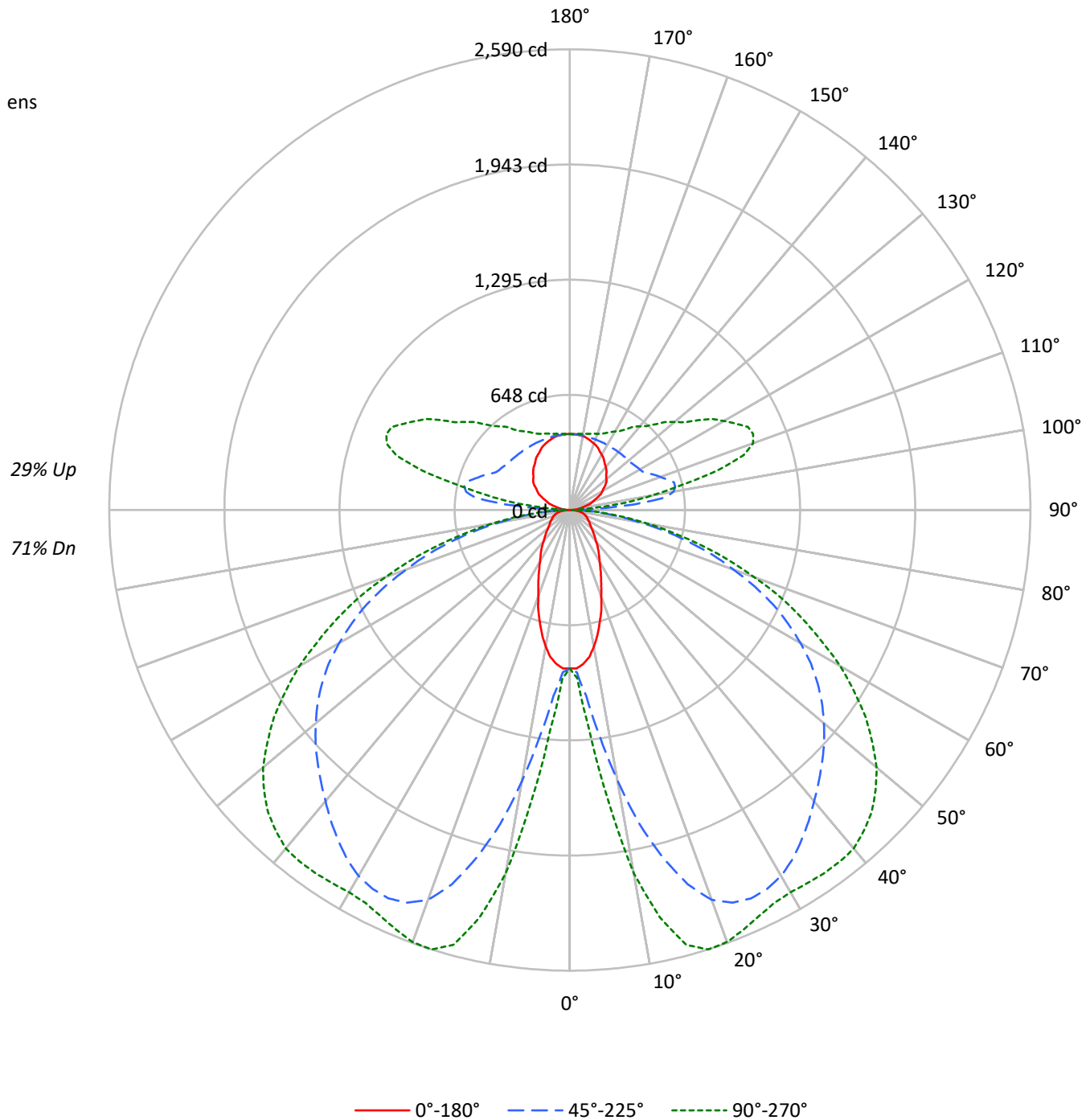
Test Method: LM-79-2019  
Report Number: P936401  
REPORT IS A COMBINATION OF REPORTS P933430 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-B40-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9666.5 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: 12' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 90  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71		
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58		
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48		
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39		
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33		
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28		
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24		
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21		
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18		
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16		
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14		

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

	0°	45°	90°
0°	2756	2756	2756
5°	2693	3186	3705
10°	2444	4646	6142
15°	2078	6071	7416
20°	1692	7037	7558
25°	1412	7366	7404
30°	1191	7414	7390
35°	1054	7293	7581
40°	919	7135	7779
45°	833	7020	7810
50°	764	6917	7680
55°	733	6765	7340
60°	751	6471	6802
65°	783	6023	6064
70°	835	5255	5123
75°	930	4289	3998
80°	1024	2978	2693
85°	927	1583	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°	115.3	1.2
10°-20°	510.8	5.3
20°-30°	893.5	9.2
30°-40°	1150.3	11.9
40°-50°	1284.8	13.3
50°-60°	1230.5	12.7
60°-70°	975.2	10.1
70°-80°	573.4	5.9
80°-90°	160.9	1.7
90°-100°	208.4	2.2
100°-110°	547.9	5.7
110°-120°	568.1	5.9
120°-130°	455.7	4.7
130°-140°	357.6	3.7
140°-150°	274.5	2.8
150°-160°	197.7	2.0
160°-170°	120.9	1.3
170°-180°	40.9	0.4
0°-30°	1519.6	15.7
0°-40°	2669.9	27.6
0°-60°	5185.2	53.6
0°-90°	6894.8	71.3
90°-120°	1324.5	13.7
90°-150°	2412.2	25.0
90°-180°	2772.0	28.7
0°-180°	9666.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	868	931	1049	1186	1229	80
15°	650	1200	2023	2452	2530	181
25°	415	1361	2410	2516	2518	191
35°	281	1301	2269	2398	2493	175
45°	192	1037	2006	2298	2401	148
55°	138	659	1702	1977	2031	125
65°	109	350	1264	1421	1441	108
75°	80	215	693	762	765	84
85°	29	66	172	189	192	30
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°	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0
2.5°	891.0	891.0	896.7	899.6	905.3	908.2	913.9	919.7	936.9	939.7	945.4
5°	868.1	879.6	916.8	931.1	971.2	1025.7	1048.6	1085.9	1163.3	1186.2	1200.5
7.5°	833.7	859.5	951.2	974.1	1074.4	1217.7	1277.9	1358.1	1481.3	1541.5	1590.2
10°	779.3	833.7	997.0	1051.5	1214.9	1432.6	1544.3	1656.1	1842.3	1925.4	1956.9
12.5°	719.1	807.9	1045.7	1120.3	1355.2	1673.3	1807.9	1931.1	2143.1	2254.9	2272.0
15°	650.4	770.7	1091.7	1200.5	1504.2	1873.8	2022.8	2174.6	2372.3	2452.5	2472.6
17.5°	590.2	742.0	1134.6	1249.2	1618.8	2054.3	2206.1	2332.2	2492.6	2547.1	2561.4
20°	515.7	696.2	1163.3	1312.3	1739.2	2186.1	2332.2	2429.6	2538.5	2572.9	2578.6
22.5°	461.3	647.5	1180.5	1335.2	1819.4	2266.3	2389.5	2466.9	2541.4	2552.8	2555.7
25°	415.4	593.1	1177.6	1361.0	1888.1	2315.0	2409.6	2466.9	2509.8	2515.6	2515.6
27.5°	372.4	532.9	1166.2	1366.7	1939.7	2326.5	2401.0	2441.1	2461.1	2472.6	2472.6
30°	335.2	475.6	1137.5	1355.2	1962.6	2315.0	2375.2	2395.2	2415.3	2432.5	2441.1
32.5°	306.6	421.2	1094.5	1332.3	1965.5	2286.4	2329.3	2340.8	2369.5	2409.6	2423.9
35°	280.8	366.7	1045.7	1300.8	1948.3	2240.5	2269.2	2280.6	2337.9	2398.1	2418.2
37.5°	255.0	326.6	982.7	1246.4	1922.5	2186.1	2206.1	2226.2	2315.0	2386.6	2409.6
40°	229.2	292.2	908.2	1186.2	1882.4	2120.2	2137.4	2168.9	2286.4	2369.5	2392.4
42.5°	209.1	263.6	828.0	1123.2	1830.8	2045.7	2071.5	2117.3	2252.0	2340.8	2366.6
45°	192.0	234.9	742.0	1037.1	1764.9	1968.4	2005.6	2068.6	2211.9	2297.8	2320.7
47.5°	174.8	214.9	653.2	948.3	1693.3	1891.0	1939.7	2011.3	2157.4	2240.5	2260.6
50°	160.4	194.8	564.4	853.8	1616.0	1807.9	1865.2	1939.7	2088.7	2166.0	2191.8
52.5°	149.0	177.6	481.3	759.2	1527.1	1722.0	1787.9	1865.2	2005.6	2080.1	2097.3
55°	137.5	163.3	409.7	658.9	1435.5	1630.3	1701.9	1776.4	1913.9	1976.9	1988.4
57.5°	131.8	151.8	349.5	564.4	1338.1	1527.1	1607.4	1676.1	1805.0	1853.8	1865.2
60°	123.2	143.2	303.7	484.2	1232.0	1429.7	1498.5	1567.3	1676.1	1716.2	1724.8
62.5°	114.6	137.5	269.3	406.8	1123.2	1315.1	1383.9	1446.9	1538.6	1567.3	1578.7
65°	108.9	131.8	243.5	349.5	1011.3	1194.8	1263.6	1318.0	1392.5	1421.1	1426.9
67.5°	103.1	126.1	223.5	300.8	899.6	1074.4	1126.0	1177.6	1234.9	1263.6	1266.4
70°	94.5	120.3	206.3	266.4	785.0	936.9	979.8	1034.3	1080.1	1094.5	1103.1
72.5°	88.8	111.7	194.8	240.7	667.5	805.1	845.2	876.7	916.8	931.1	931.1
75°	80.2	100.3	183.4	214.9	547.2	658.9	693.3	724.8	756.4	762.1	753.5
77.5°	71.6	88.8	157.6	180.5	426.9	521.4	550.1	567.3	593.1	598.8	601.6
80°	60.2	77.4	123.2	140.4	309.4	383.9	404.0	418.3	441.2	441.2	446.9
82.5°	45.8	60.2	88.8	100.3	209.1	263.6	280.8	289.4	303.7	303.7	303.7
85°	28.6	37.2	57.3	65.9	126.1	160.4	171.9	174.8	186.2	189.1	189.1
87.5°	14.3	20.1	37.2	40.1	65.9	83.1	83.1	88.8	88.8	86.0	83.1
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°	891.0	891.0
2.5°	951.2	945.4
5°	1223.5	1229.2
7.5°	1647.5	1644.6
10°	2048.6	2074.4
12.5°	2340.8	2346.5
15°	2518.4	2529.9
17.5°	2587.2	2590.1
20°	2590.1	2584.3
22.5°	2558.5	2552.8
25°	2521.3	2518.4
27.5°	2486.9	2489.8
30°	2472.6	2481.2
32.5°	2472.6	2486.9
35°	2478.3	2492.6
37.5°	2475.5	2492.6
40°	2464.0	2484.1
42.5°	2432.5	2446.8
45°	2383.8	2401.0
47.5°	2320.7	2332.2
50°	2240.5	2252.0
52.5°	2140.3	2143.1
55°	2019.9	2031.4
57.5°	1891.0	1893.9
60°	1747.7	1756.3
62.5°	1595.9	1595.9
65°	1435.5	1441.2
67.5°	1269.3	1283.6
70°	1100.3	1103.1
72.5°	934.0	934.0
75°	762.1	765.0
77.5°	598.8	598.8
80°	444.1	446.9
82.5°	306.6	312.3
85°	192.0	192.0
87.5°	88.8	80.2
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	6.27	7.43	7.01	8.20	9.12	19.47	20.62	20.21	21.39	22.32
	3H	7.00	8.04	7.75	8.82	9.78	21.33	22.37	22.09	23.15	24.11
	4H	7.31	8.29	8.08	9.08	10.05	21.99	22.98	22.76	23.77	24.73
	6H	7.58	8.49	8.36	9.28	10.27	22.44	23.35	23.23	24.15	25.13
	8H	7.65	8.52	8.45	9.34	10.32	22.57	23.44	23.37	24.26	25.24
	12H	7.68	8.51	8.48	9.32	10.33	22.66	23.49	23.46	24.30	25.31
4H	2H	13.53	14.52	14.31	15.30	16.27	19.77	20.76	20.55	21.55	22.51
	3H	15.12	15.95	15.91	16.77	17.76	21.85	22.68	22.64	23.50	24.49
	4H	15.23	15.98	16.03	16.81	17.82	22.63	23.39	23.44	24.21	25.22
	6H	15.26	15.91	16.08	16.76	17.78	23.19	23.85	24.01	24.70	25.71
	8H	15.24	15.86	16.07	16.70	17.73	23.37	23.98	24.19	24.82	25.85
	12H	15.22	15.77	16.06	16.63	17.67	23.48	24.03	24.32	24.89	25.93
8H	4H	16.70	17.32	17.53	18.16	19.19	22.72	23.33	23.54	24.17	25.21
	6H	16.96	17.47	17.81	18.35	19.39	23.37	23.88	24.22	24.76	25.79
	8H	16.98	17.44	17.85	18.31	19.36	23.59	24.05	24.46	24.92	25.97
	12H	16.97	17.37	17.83	18.24	19.34	23.76	24.15	24.62	25.03	26.13
12H	4H	16.86	17.42	17.71	18.28	19.32	22.69	23.24	23.53	24.10	25.14
	6H	17.22	17.68	18.09	18.56	19.61	23.35	23.81	24.22	24.69	25.73
	8H	17.31	17.71	18.18	18.58	19.68	23.60	24.00	24.47	24.87	25.97