

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: P936214

Luminaire Tested: SQ4-FB-025U-050D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

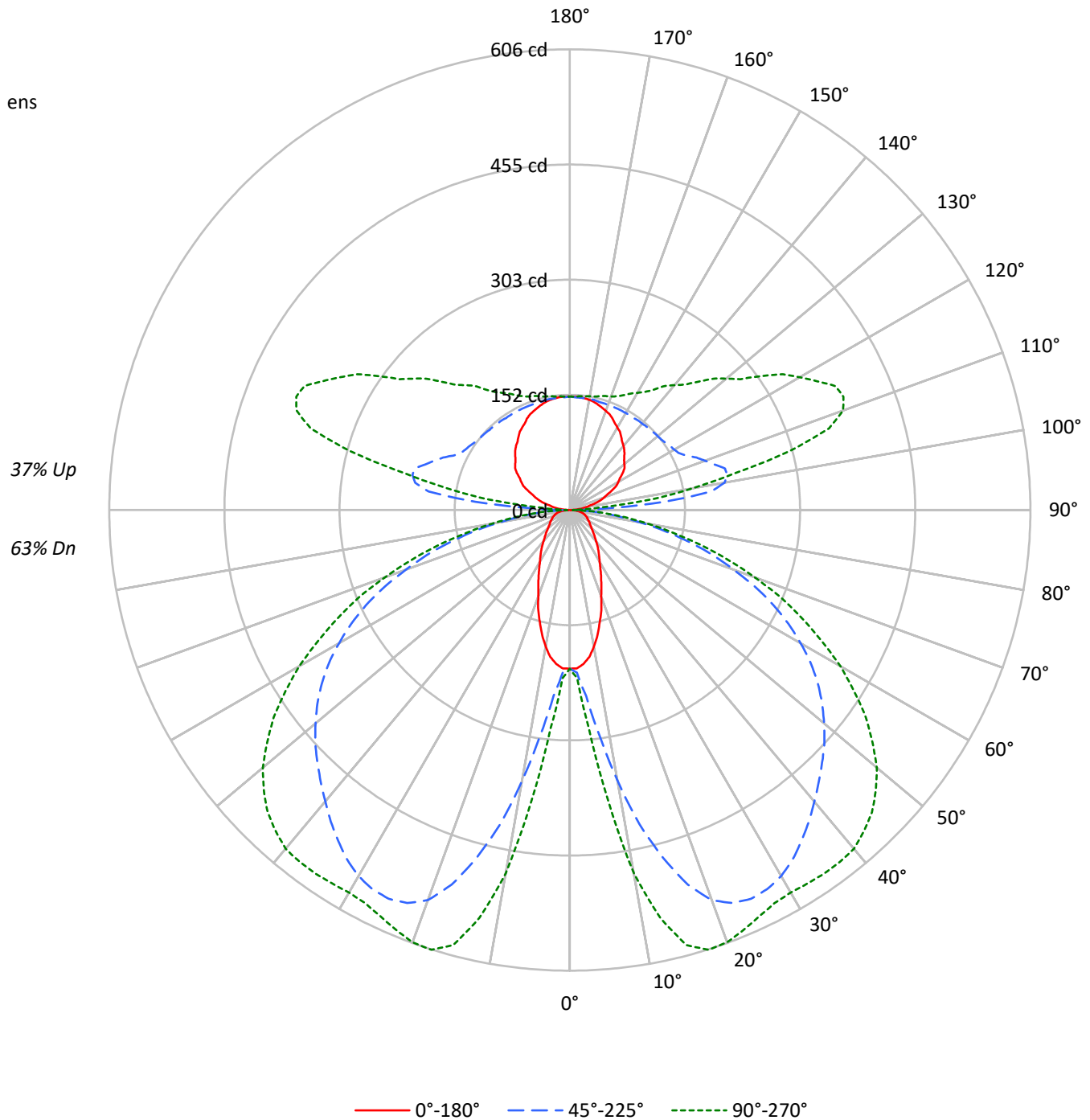
Test Method: LM-79-2019  
Report Number: P936214  
REPORT IS A COMBINATION OF REPORTS P933437 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2582.0 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 22  
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





TEST NUMBER: P936214

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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	64	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°	1936	1936	1936
5°	1890	2236	2602
10°	1712	3257	4314
15°	1453	4252	5210
20°	1182	4924	5309
25°	985	5149	5201
30°	829	5177	5192
35°	731	5087	5325
40°	637	4972	5464
45°	575	4885	5486
50°	527	4806	5395
55°	503	4694	5155
60°	512	4482	4778
65°	531	4161	4259
70°	561	3622	3599
75°	617	2945	2808
80°	660	2036	1893
85°	555	1076	967

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5486 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.0	1.0
10°-20°	119.6	4.6
20°-30°	209.2	8.1
30°-40°	269.3	10.4
40°-50°	300.8	11.7
50°-60°	288.1	11.2
60°-70°	228.3	8.8
70°-80°	134.3	5.2
80°-90°	37.9	1.5
90°-100°	72.7	2.8
100°-110°	191.3	7.4
110°-120°	198.3	7.7
120°-130°	159.0	6.2
130°-140°	124.8	4.8
140°-150°	95.8	3.7
150°-160°	69.0	2.7
160°-170°	42.2	1.6
170°-180°	14.3	0.6
0°-30°	355.8	13.8
0°-40°	625.1	24.2
0°-60°	1214.1	47.0
0°-90°	1614.6	62.5
90°-120°	462.3	17.9
90°-150°	842.0	32.6
90°-180°	967.0	37.5
0°-180°	2582.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	209	209	209	209	209	
5°	203	218	246	278	288	19
15°	152	281	474	574	592	42
25°	97	319	564	589	590	45
35°	66	305	531	562	584	41
45°	45	243	470	538	562	35
55°	32	154	398	463	476	29
65°	26	82	296	333	337	25
75°	19	50	162	178	179	20
85°	7	15	40	44	45	7
90°	1	3	8	4	4	1
95°	10	38	125	65	44	11
105°	34	52	211	321	300	37
115°	61	74	169	338	386	60
125°	85	96	154	260	307	76
135°	102	112	149	210	238	79
145°	118	125	147	179	193	74
155°	133	137	147	162	166	61
165°	144	145	147	153	155	40
175°	149	149	148	150	150	14
180°	149	149	149	149	149	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6
2.5°	208.6	208.6	210.0	210.6	212.0	212.7	214.0	215.3	219.4	220.0	221.4
5°	203.3	206.0	214.7	218.0	227.4	240.2	245.5	254.3	272.4	277.7	281.1
7.5°	195.2	201.3	222.7	228.1	251.6	285.1	299.2	318.0	346.8	360.9	372.3
10°	182.5	195.2	233.5	246.2	284.4	335.4	361.6	387.8	431.4	450.8	458.2
12.5°	168.4	189.2	244.9	262.3	317.3	391.8	423.3	452.2	501.8	528.0	532.0
15°	152.3	180.5	255.6	281.1	352.2	438.7	473.6	509.2	555.5	574.2	578.9
17.5°	138.2	173.8	265.7	292.5	379.0	481.0	516.6	546.1	583.6	596.4	599.7
20°	120.8	163.0	272.4	307.3	407.2	511.9	546.1	568.9	594.4	602.4	603.8
22.5°	108.0	151.6	276.4	312.6	426.0	530.6	559.5	577.6	595.0	597.7	598.4
25°	97.3	138.9	275.7	318.7	442.1	542.0	564.2	577.6	587.7	589.0	589.0
27.5°	87.2	124.8	273.0	320.0	454.2	544.7	562.2	571.6	576.3	578.9	578.9
30°	78.5	111.4	266.3	317.3	459.5	542.0	556.1	560.8	565.5	569.6	571.6
32.5°	71.8	98.6	256.3	311.9	460.2	535.3	545.4	548.1	554.8	564.2	567.5
35°	65.7	85.9	244.9	304.6	456.2	524.6	531.3	534.0	547.4	561.5	566.2
37.5°	59.7	76.5	230.1	291.8	450.1	511.9	516.6	521.3	542.0	558.8	564.2
40°	53.7	68.4	212.7	277.7	440.8	496.4	500.5	507.8	535.3	554.8	560.2
42.5°	49.0	61.7	193.9	263.0	428.7	479.0	485.0	495.8	527.3	548.1	554.1
45°	44.9	55.0	173.8	242.8	413.2	460.9	469.6	484.4	517.9	538.0	543.4
47.5°	40.9	50.3	153.0	222.1	396.5	442.8	454.2	470.9	505.2	524.6	529.3
50°	37.6	45.6	132.2	199.9	378.4	423.3	436.7	454.2	489.1	507.2	513.2
52.5°	34.9	41.6	112.7	177.8	357.6	403.2	418.6	436.7	469.6	487.0	491.1
55°	32.2	38.2	95.9	154.3	336.1	381.7	398.5	415.9	448.1	462.9	465.6
57.5°	30.9	35.6	81.8	132.2	313.3	357.6	376.3	392.4	422.6	434.0	436.7
60°	28.8	33.5	71.1	113.4	288.5	334.8	350.9	367.0	392.4	401.8	403.9
62.5°	26.8	32.2	63.1	95.3	263.0	307.9	324.0	338.8	360.2	367.0	369.6
65°	25.5	30.9	57.0	81.8	236.8	279.7	295.8	308.6	326.0	332.7	334.1
67.5°	24.2	29.5	52.3	70.4	210.6	251.6	263.6	275.7	289.1	295.8	296.5
70°	22.1	28.2	48.3	62.4	183.8	219.4	229.4	242.2	252.9	256.3	258.3
72.5°	20.8	26.2	45.6	56.4	156.3	188.5	197.9	205.3	214.7	218.0	218.0
75°	18.8	23.5	42.9	50.3	128.1	154.3	162.3	169.7	177.1	178.4	176.4
77.5°	16.8	20.8	36.9	42.3	100.0	122.1	128.8	132.8	138.9	140.2	140.9
80°	14.1	18.1	28.8	32.9	72.5	89.9	94.6	97.9	103.3	103.3	104.7
82.5°	10.7	14.1	20.8	23.5	49.0	61.7	65.7	67.8	71.1	71.1	71.1
85°	6.7	8.7	13.4	15.4	29.5	37.6	40.3	40.9	43.6	44.3	44.3
87.5°	3.4	4.7	8.7	9.4	15.4	19.5	19.5	20.8	20.8	20.1	19.5
90°	1.0	1.8	2.6	2.8	4.4	6.5	7.6	6.8	5.1	3.8	3.8
92.5°	4.0	10.8	17.6	19.3	27.2	37.7	42.9	37.6	27.0	19.0	18.2
95°	9.6	22.1	34.6	37.7	66.9	105.8	125.3	111.8	84.8	64.6	62.3
97.5°	16.6	27.6	38.6	41.4	90.1	155.0	187.5	179.0	161.9	149.1	144.7
100°	22.0	32.0	42.0	44.5	98.5	170.6	206.6	207.2	208.5	209.4	204.2
102.5°	26.6	35.9	45.3	47.6	102.4	175.5	212.0	222.9	244.6	260.9	256.4
105°	34.5	42.4	50.2	52.2	105.3	176.0	211.4	235.8	284.5	321.0	318.6
107.5°	42.5	49.8	57.2	59.0	105.8	168.2	199.4	233.4	301.3	352.3	352.9
110°	47.9	54.5	61.1	62.8	105.0	161.3	189.4	227.4	303.3	360.3	362.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	53.2	59.5	65.8	67.4	105.0	155.2	180.3	219.2	296.9	355.2	359.0
115°	61.2	67.0	72.8	74.3	106.0	148.3	169.4	206.8	281.7	337.8	343.1
117.5°	69.1	74.4	79.7	81.0	108.0	143.9	161.9	195.7	263.2	313.9	319.8
120°	73.7	78.7	83.7	84.9	109.5	142.4	158.8	189.7	251.5	297.8	303.5
122.5°	78.2	83.2	88.2	89.5	111.8	141.6	156.5	184.3	239.9	281.6	287.2
125°	85.1	89.7	94.3	95.5	115.0	141.0	154.0	177.6	224.9	260.3	265.5
127.5°	90.7	95.4	100.0	101.2	118.1	140.6	151.9	172.2	212.8	243.2	247.6
130°	93.7	98.7	103.7	105.0	120.4	140.9	151.1	169.2	205.3	232.4	236.4
132.5°	96.9	101.9	106.9	108.1	122.2	141.0	150.4	166.6	198.9	223.2	226.8
135°	101.5	106.0	110.6	111.7	124.2	140.9	149.2	162.7	189.8	210.1	213.2
137.5°	106.2	110.7	115.2	116.3	127.2	141.7	149.0	160.4	183.3	200.5	203.1
140°	110.1	114.2	118.4	119.4	129.0	141.9	148.3	158.2	178.0	192.8	195.2
142.5°	113.1	116.9	120.7	121.7	130.6	142.4	148.3	157.0	174.4	187.4	189.5
145°	117.7	121.0	124.4	125.2	132.6	142.4	147.3	154.4	168.6	179.3	180.9
147.5°	122.3	125.5	128.8	129.6	135.5	143.4	147.3	152.9	164.1	172.5	173.8
150°	125.3	128.2	131.2	131.9	137.0	143.9	147.3	152.0	161.5	168.6	169.6
152.5°	128.4	130.6	132.8	133.4	138.0	144.2	147.3	151.3	159.4	165.5	166.3
155°	133.0	134.6	136.3	136.7	140.2	144.9	147.3	150.5	157.0	161.8	162.3
157.5°	136.4	138.0	139.6	140.0	142.4	145.7	147.3	149.8	154.8	158.5	158.9
160°	138.7	139.9	141.2	141.5	143.4	146.0	147.3	149.4	153.7	156.9	157.1
162.5°	141.0	141.9	142.9	143.1	144.5	146.4	147.3	149.1	152.7	155.4	155.6
165°	143.5	144.3	145.2	145.4	146.0	146.9	147.3	148.6	151.2	153.1	153.3
167.5°	145.8	146.2	146.6	146.7	147.2	147.9	148.3	149.1	150.8	152.1	152.2
170°	147.3	147.7	148.1	148.2	148.2	148.3	148.3	149.1	150.8	152.1	152.1
172.5°	148.1	148.2	148.3	148.3	148.3	148.3	148.3	149.0	150.3	151.3	151.2
175°	149.2	149.2	149.2	149.2	148.9	148.5	148.3	148.7	149.6	150.2	150.2
177.5°	149.2	149.2	149.2	149.2	149.0	148.7	148.5	148.8	149.5	150.0	149.9
180°	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2	149.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	208.6	208.6
2.5°	222.7	221.4
5°	286.5	287.8
7.5°	385.7	385.1
10°	479.7	485.7
12.5°	548.1	549.4
15°	589.7	592.4
17.5°	605.8	606.5
20°	606.5	605.1
22.5°	599.1	597.7
25°	590.4	589.7
27.5°	582.3	583.0
30°	578.9	581.0
32.5°	578.9	582.3
35°	580.3	583.6
37.5°	579.6	583.6
40°	576.9	581.6
42.5°	569.6	572.9
45°	558.1	562.2
47.5°	543.4	546.1
50°	524.6	527.3
52.5°	501.1	501.8
55°	473.0	475.6
57.5°	442.8	443.4
60°	409.2	411.2
62.5°	373.7	373.7
65°	336.1	337.4
67.5°	297.2	300.5
70°	257.6	258.3
72.5°	218.7	218.7
75°	178.4	179.1
77.5°	140.2	140.2
80°	104.0	104.7
82.5°	71.8	73.1
85°	44.9	44.9
87.5°	20.8	18.8
90°	3.8	3.8
92.5°	15.2	12.2
95°	53.2	44.0
97.5°	127.3	109.9
100°	183.5	162.7
102.5°	238.6	220.8
105°	309.1	299.5
107.5°	355.2	357.5
110°	372.7	382.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	374.3	389.6
115°	364.4	385.6
117.5°	343.3	366.9
120°	326.4	349.2
122.5°	309.8	332.4
125°	286.3	307.1
127.5°	265.1	282.6
130°	252.6	268.8
132.5°	241.3	255.8
135°	225.8	238.3
137.5°	213.3	223.6
140°	204.7	214.3
142.5°	197.7	205.9
145°	187.1	193.3
147.5°	178.9	184.1
150°	173.8	178.0
152.5°	169.4	172.6
155°	164.4	166.5
157.5°	160.4	161.9
160°	158.0	158.8
162.5°	156.4	157.2
165°	154.2	155.0
167.5°	152.5	152.9
170°	152.1	152.1
172.5°	150.9	150.6
175°	150.2	150.2
177.5°	149.6	149.2
180°	149.2	149.2



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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	4.35	5.39	5.18	6.25	7.33	17.49	18.53	18.32	19.39	20.47
	3H	5.07	6.00	5.91	6.87	7.98	19.33	20.26	20.17	21.13	22.24
	4H	5.38	6.26	6.24	7.14	8.25	19.97	20.86	20.83	21.73	22.85
	6H	5.64	6.45	6.51	7.34	8.47	20.40	21.22	21.27	22.10	23.23
	8H	5.71	6.49	6.59	7.39	8.52	20.52	21.30	21.40	22.20	23.33
	12H	5.73	6.48	6.62	7.38	8.53	20.59	21.33	21.47	22.23	23.38
4H	2H	11.56	12.45	12.43	13.33	14.44	17.79	18.67	18.65	19.55	20.66
	3H	13.15	13.89	14.03	14.80	15.93	19.83	20.58	20.71	21.49	22.62
	4H	13.25	13.93	14.14	14.84	15.99	20.60	21.28	21.49	22.18	23.34
	6H	13.27	13.86	14.18	14.79	15.95	21.14	21.72	22.04	22.65	23.81
	8H	13.26	13.80	14.16	14.73	15.90	21.30	21.84	22.20	22.77	23.94
	12H	13.22	13.72	14.15	14.66	15.84	21.39	21.89	22.32	22.83	24.01
8H	4H	14.70	15.25	15.61	16.18	17.35	20.68	21.22	21.58	22.15	23.32
	6H	14.95	15.41	15.89	16.37	17.55	21.30	21.76	22.24	22.72	23.89
	8H	14.97	15.38	15.92	16.33	17.52	21.52	21.92	22.46	22.88	24.06
	12H	14.95	15.31	15.90	16.26	17.49	21.66	22.02	22.61	22.97	24.20
12H	4H	14.85	15.35	15.78	16.29	17.47	20.64	21.13	21.57	22.08	23.25
	6H	15.21	15.62	16.16	16.57	17.76	21.29	21.69	22.23	22.65	23.84
	8H	15.29	15.64	16.24	16.60	17.83	21.52	21.87	22.47	22.82	24.06