

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: P937122

Luminaire Tested: SQ4-FB-075U-075D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937122
REPORT IS A COMBINATION OF REPORTS P933502 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

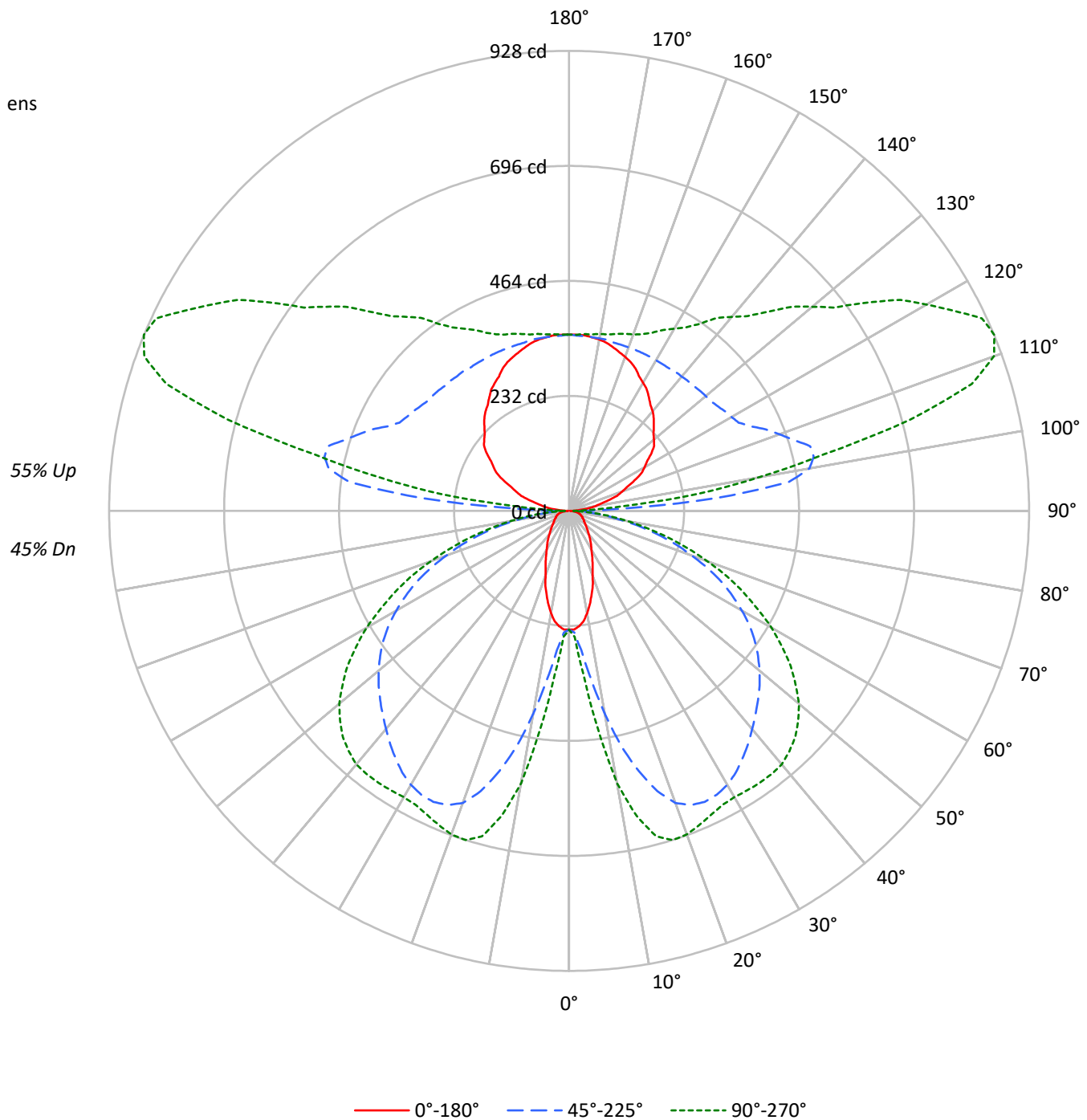
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4159.5 lumens
Efficiency: N/A
Efficacy: 98.1 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: General Diffuse

Input Watts (W): 42.4
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				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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45			45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37			37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30			30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25			25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21			21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17			17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15			15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13			13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11			11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10			10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2168	2566	2987
10°	1964	3738	4952
15°	1668	4880	5979
20°	1356	5652	6093
25°	1129	5910	5970
30°	952	5942	5958
35°	841	5839	6113
40°	731	5706	6272
45°	661	5607	6297
50°	604	5517	6192
55°	578	5388	5917
60°	589	5144	5484
65°	611	4777	4889
70°	645	4157	4129
75°	708	3380	3223
80°	758	2337	2171
85°	638	1233	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	0.7
10°-20°	137.3	3.3
20°-30°	240.1	5.8
30°-40°	309.1	7.4
40°-50°	345.3	8.3
50°-60°	330.7	8.0
60°-70°	262.1	6.3
70°-80°	154.1	3.7
80°-90°	44.2	1.1
90°-100°	173.4	4.2
100°-110°	455.8	11.0
110°-120°	472.6	11.4
120°-130°	379.1	9.1
130°-140°	297.5	7.2
140°-150°	228.3	5.5
150°-160°	164.4	4.0
160°-170°	100.6	2.4
170°-180°	34.0	0.8
0°-30°	408.4	9.8
0°-40°	717.5	17.3
0°-60°	1393.5	33.5
0°-90°	1853.9	44.6
90°-120°	1101.7	26.5
90°-150°	2006.6	48.2
90°-180°	2306.0	55.4
0°-180°	4159.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	233	250	282	319	330	22
15°	175	323	544	659	680	49
25°	112	366	648	676	677	51
35°	76	350	610	644	670	47
45°	52	279	539	618	645	40
55°	37	177	457	531	546	34
65°	29	94	340	382	387	29
75°	22	58	186	205	206	23
85°	8	18	46	51	52	8
90°	2	7	18	9	9	2
95°	23	90	299	154	105	25
105°	82	124	504	765	714	87
115°	146	177	404	805	919	144
125°	203	228	367	620	732	180
135°	242	266	356	501	568	187
145°	280	298	351	427	461	176
155°	317	326	351	386	397	146
165°	342	347	351	365	370	97
175°	356	356	354	358	358	34
180°	356	356	356	356	356	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5
2.5°	239.5	239.5	241.0	241.8	243.3	244.1	245.6	247.2	251.8	252.6	254.1
5°	233.3	236.4	246.4	250.2	261.0	275.7	281.8	291.8	312.6	318.8	322.6
7.5°	224.1	231.0	255.6	261.8	288.8	327.2	343.4	365.0	398.1	414.3	427.4
10°	209.4	224.1	268.0	282.6	326.5	385.0	415.0	445.1	495.1	517.4	525.9
12.5°	193.3	217.1	281.0	301.1	364.2	449.7	485.9	519.0	576.0	606.0	610.6
15°	174.8	207.1	293.4	322.6	404.2	503.6	543.6	584.4	637.6	659.1	664.5
17.5°	158.6	199.4	304.9	335.7	435.0	552.1	592.9	626.8	669.9	684.5	688.4
20°	138.6	187.1	312.6	352.7	467.4	587.5	626.8	653.0	682.2	691.5	693.0
22.5°	124.0	174.0	317.2	358.8	489.0	609.1	642.2	663.0	683.0	686.1	686.8
25°	111.6	159.4	316.5	365.8	507.4	622.2	647.6	663.0	674.5	676.1	676.1
27.5°	100.1	143.2	313.4	367.3	521.3	625.2	645.3	656.0	661.4	664.5	664.5
30°	90.1	127.8	305.7	364.2	527.4	622.2	638.3	643.7	649.1	653.7	656.0
32.5°	82.4	113.2	294.1	358.0	528.2	614.5	626.0	629.1	636.8	647.6	651.4
35°	75.5	98.6	281.0	349.6	523.6	602.1	609.8	612.9	628.3	644.5	649.9
37.5°	68.5	87.8	264.1	335.0	516.7	587.5	592.9	598.3	622.2	641.4	647.6
40°	61.6	78.5	244.1	318.8	505.9	569.8	574.4	582.9	614.5	636.8	643.0
42.5°	56.2	70.8	222.5	301.8	492.0	549.8	556.7	569.0	605.2	629.1	636.0
45°	51.6	63.1	199.4	278.7	474.3	529.0	539.0	555.9	594.4	617.5	623.7
47.5°	47.0	57.8	175.6	254.9	455.1	508.2	521.3	540.5	579.8	602.1	607.5
50°	43.1	52.4	151.7	229.5	434.3	485.9	501.3	521.3	561.3	582.1	589.1
52.5°	40.0	47.7	129.4	204.0	410.4	462.8	480.5	501.3	539.0	559.0	563.6
55°	37.0	43.9	110.1	177.1	385.8	438.1	457.4	477.4	514.4	531.3	534.4
57.5°	35.4	40.8	93.9	151.7	359.6	410.4	432.0	450.4	485.1	498.2	501.3
60°	33.1	38.5	81.6	130.1	331.1	384.2	402.7	421.2	450.4	461.2	463.5
62.5°	30.8	37.0	72.4	109.3	301.8	353.4	371.9	388.8	413.5	421.2	424.3
65°	29.3	35.4	65.4	93.9	271.8	321.1	339.6	354.2	374.2	381.9	383.5
67.5°	27.7	33.9	60.1	80.9	241.8	288.8	302.6	316.5	331.9	339.6	340.3
70°	25.4	32.3	55.4	71.6	211.0	251.8	263.3	278.0	290.3	294.1	296.4
72.5°	23.9	30.0	52.4	64.7	179.4	216.4	227.2	235.6	246.4	250.2	250.2
75°	21.6	27.0	49.3	57.8	147.1	177.1	186.3	194.8	203.3	204.8	202.5
77.5°	19.2	23.9	42.4	48.5	114.7	140.1	147.8	152.5	159.4	160.9	161.7
80°	16.2	20.8	33.1	37.7	83.2	103.2	108.6	112.4	118.6	118.6	120.1
82.5°	12.3	16.2	23.9	27.0	56.2	70.8	75.5	77.8	81.6	81.6	81.6
85°	7.7	10.0	15.4	17.7	33.9	43.1	46.2	47.0	50.1	50.8	50.8
87.5°	3.8	5.4	10.0	10.8	17.7	22.3	22.3	23.9	23.9	23.1	22.3
90°	2.4	4.3	6.2	6.7	10.5	15.6	18.2	16.2	12.1	9.1	9.1
92.5°	9.5	25.8	42.0	46.0	64.8	89.7	102.2	89.6	64.3	45.4	43.6
95°	22.9	52.7	82.4	89.8	159.4	252.2	298.6	266.4	202.1	153.9	148.5
97.5°	39.7	65.8	92.0	98.6	214.7	369.4	446.8	426.5	385.9	355.4	345.0
100°	52.5	76.2	100.0	106.0	234.8	406.6	492.4	493.9	496.9	499.1	486.7
102.5°	63.5	85.7	107.8	113.3	244.0	418.3	505.4	531.2	583.0	621.8	611.1
105°	82.1	100.9	119.7	124.4	250.9	419.6	503.9	561.9	678.0	765.0	759.3
107.5°	101.2	118.7	136.2	140.6	252.2	400.9	475.2	556.2	718.0	839.5	840.8
110°	114.1	129.9	145.8	149.7	250.2	384.3	451.4	541.8	722.8	858.6	864.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	126.7	141.8	156.8	160.6	250.3	369.9	429.7	522.3	707.5	846.4	855.5
115°	145.8	159.7	173.6	177.1	252.6	353.3	403.6	492.9	671.3	805.1	817.7
117.5°	164.7	177.3	190.0	193.1	257.3	342.9	385.7	466.2	627.2	748.1	762.1
120°	175.7	187.6	199.4	202.4	261.1	339.4	378.5	452.1	599.3	709.6	723.3
122.5°	186.4	198.4	210.4	213.4	266.6	337.6	373.1	439.3	571.8	671.2	684.7
125°	202.9	213.8	224.8	227.5	274.0	336.1	367.1	423.4	536.0	620.4	632.8
127.5°	216.3	227.3	238.3	241.1	281.4	335.3	362.1	410.5	507.1	579.6	590.1
130°	223.5	235.3	247.2	250.2	286.8	335.7	360.2	403.2	489.3	553.8	563.4
132.5°	230.8	242.7	254.6	257.6	291.2	336.1	358.5	397.0	474.1	531.8	540.5
135°	241.8	252.6	263.4	266.1	296.0	335.8	355.7	387.9	452.5	500.8	508.3
137.5°	253.0	263.7	274.4	277.1	303.1	337.9	355.2	382.5	437.0	477.9	483.9
140°	262.3	272.2	282.1	284.5	307.5	338.2	353.5	377.1	424.1	459.5	465.2
142.5°	269.5	278.6	287.7	290.0	311.2	339.4	353.5	374.2	415.6	446.6	451.5
145°	280.4	288.4	296.4	298.4	315.9	339.4	351.1	368.1	401.9	427.3	431.0
147.5°	291.4	299.1	306.9	308.8	322.9	341.7	351.1	364.4	391.1	411.0	414.1
150°	298.6	305.6	312.6	314.4	326.6	343.0	351.1	362.4	384.8	401.7	404.2
152.5°	306.0	311.3	316.6	317.9	329.0	343.7	351.1	360.7	379.9	394.3	396.2
155°	317.0	320.9	324.8	325.8	334.3	345.5	351.1	358.7	374.0	385.5	386.7
157.5°	325.1	328.9	332.8	333.7	339.5	347.3	351.1	357.0	368.9	377.8	378.7
160°	330.6	333.6	336.5	337.3	341.9	348.0	351.1	356.2	366.4	374.1	374.5
162.5°	336.1	338.3	340.6	341.1	344.4	348.9	351.1	355.4	364.0	370.4	370.9
165°	342.0	344.0	346.0	346.6	348.1	350.1	351.1	354.2	360.4	365.0	365.5
167.5°	347.5	348.4	349.4	349.7	351.0	352.7	353.5	355.5	359.6	362.6	362.8
170°	351.1	352.0	353.0	353.3	353.4	353.4	353.5	355.5	359.6	362.6	362.6
172.5°	353.0	353.3	353.4	353.5	353.5	353.5	353.5	355.1	358.3	360.7	360.5
175°	355.7	355.7	355.7	355.7	355.0	354.0	353.5	354.5	356.5	358.0	358.0
177.5°	355.7	355.7	355.7	355.7	355.1	354.4	354.0	354.7	356.4	357.6	357.4
180°	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	239.5	239.5
2.5°	255.6	254.1
5°	328.8	330.3
7.5°	442.8	442.0
10°	550.6	557.5
12.5°	629.1	630.6
15°	676.8	679.9
17.5°	695.3	696.1
20°	696.1	694.5
22.5°	687.6	686.1
25°	677.6	676.8
27.5°	668.4	669.1
30°	664.5	666.8
32.5°	664.5	668.4
35°	666.1	669.9
37.5°	665.3	669.9
40°	662.2	667.6
42.5°	653.7	657.6
45°	640.6	645.3
47.5°	623.7	626.8
50°	602.1	605.2
52.5°	575.2	576.0
55°	542.8	545.9
57.5°	508.2	509.0
60°	469.7	472.0
62.5°	428.9	428.9
65°	385.8	387.3
67.5°	341.1	345.0
70°	295.7	296.4
72.5°	251.0	251.0
75°	204.8	205.6
77.5°	160.9	160.9
80°	119.4	120.1
82.5°	82.4	83.9
85°	51.6	51.6
87.5°	23.9	21.6
90°	9.1	9.1
92.5°	36.3	29.1
95°	126.7	104.8
97.5°	303.5	261.9
100°	437.2	387.6
102.5°	568.7	526.3
105°	736.5	713.7
107.5°	846.4	851.9
110°	888.3	912.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	892.0	928.5
115°	868.4	919.0
117.5°	818.2	874.3
120°	777.8	832.3
122.5°	738.4	792.3
125°	682.3	731.8
127.5°	631.8	673.6
130°	602.1	640.6
132.5°	575.0	609.6
135°	538.1	567.9
137.5°	508.4	532.8
140°	488.0	510.8
142.5°	471.1	490.7
145°	445.8	460.7
147.5°	426.4	438.7
150°	414.2	424.2
152.5°	403.7	411.3
155°	391.7	396.7
157.5°	382.2	385.7
160°	376.5	378.5
162.5°	372.8	374.8
165°	367.5	369.5
167.5°	363.7	364.5
170°	362.6	362.6
172.5°	359.7	359.0
175°	358.0	358.0
177.5°	356.5	355.7
180°	355.7	355.7



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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	3.25	4.09	4.24	5.10	6.45	16.39	17.23	17.38	18.25	19.59
	3H	3.95	4.71	4.96	5.73	7.10	18.21	18.97	19.22	19.99	21.36
	4H	4.25	4.97	5.27	6.00	7.37	18.84	19.57	19.86	20.59	21.96
	6H	4.50	5.17	5.53	6.19	7.58	19.26	19.93	20.29	20.96	22.34
	8H	4.57	5.20	5.60	6.25	7.63	19.38	20.01	20.41	21.05	22.44
	12H	4.59	5.19	5.63	6.23	7.63	19.44	20.04	20.48	21.08	22.48
4H	2H	10.44	11.16	11.46	12.18	13.55	16.66	17.38	17.69	18.41	19.78
	3H	12.01	12.61	13.04	13.66	15.05	18.69	19.30	19.72	20.35	21.73
	4H	12.10	12.66	13.14	13.70	15.11	19.45	20.00	20.49	21.04	22.45
	6H	12.11	12.59	13.16	13.66	15.06	19.97	20.45	21.02	21.52	22.92
	8H	12.09	12.53	13.14	13.59	15.01	20.13	20.57	21.18	21.63	23.05
	12H	12.04	12.45	13.11	13.52	14.95	20.21	20.62	21.28	21.69	23.11
8H	4H	13.53	13.98	14.59	15.04	16.46	19.51	19.95	20.56	21.01	22.43
	6H	13.78	14.15	14.85	15.25	16.66	20.12	20.49	21.20	21.59	23.01
	8H	13.79	14.12	14.88	15.20	16.64	20.33	20.66	21.42	21.74	23.18
	12H	13.76	14.05	14.85	15.13	16.60	20.47	20.76	21.56	21.84	23.31
12H	4H	13.67	14.08	14.74	15.15	16.58	19.46	19.86	20.53	20.94	22.36
	6H	14.03	14.36	15.11	15.44	16.88	20.11	20.43	21.19	21.52	22.95
	8H	14.10	14.39	15.19	15.47	16.94	20.33	20.61	21.42	21.69	23.17