

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: P936616

Luminaire Tested: SQ4-FB-050U-050D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936616
REPORT IS A COMBINATION OF REPORTS P933485 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

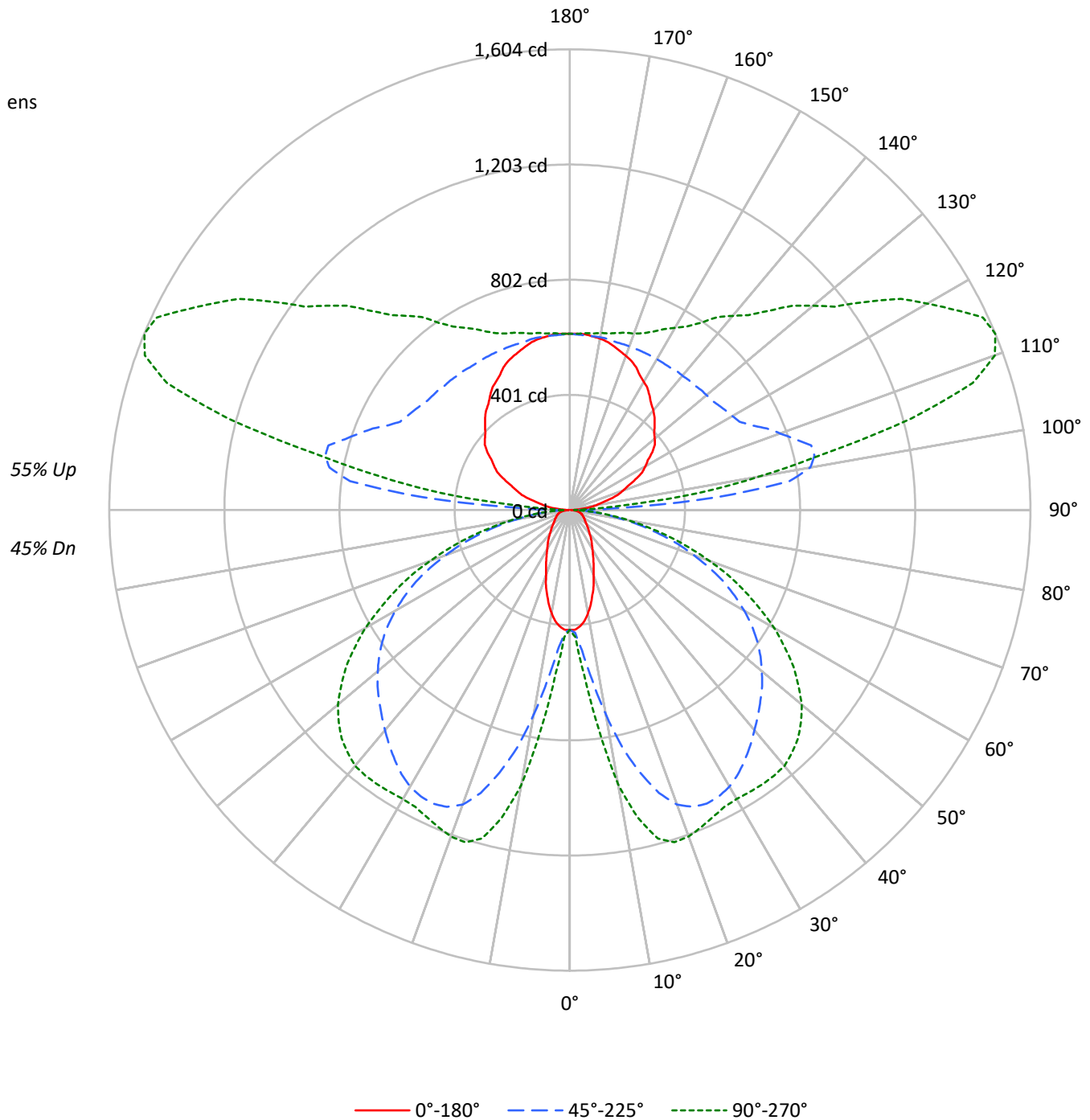
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7211.0 lumens
Efficiency: N/A
Efficacy: 127.0 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: General Diffuse

Input Watts (W): 56.8
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	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1935	1935	1935
5°	1891	2237	2601
10°	1715	3261	4313
15°	1458	4260	5208
20°	1186	4937	5307
25°	990	5166	5200
30°	835	5199	5190
35°	738	5112	5324
40°	643	5000	5463
45°	583	4918	5484
50°	534	4844	5393
55°	512	4736	5154
60°	524	4528	4777
65°	545	4212	4258
70°	581	3673	3597
75°	644	2995	2807
80°	704	2077	1891
85°	624	1102	968

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5484 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	0.7
10°-20°	239.1	3.3
20°-30°	418.3	5.8
30°-40°	538.5	7.5
40°-50°	601.5	8.3
50°-60°	576.1	8.0
60°-70°	456.5	6.3
70°-80°	268.5	3.7
80°-90°	76.9	1.1
90°-100°	299.4	4.2
100°-110°	787.1	10.9
110°-120°	816.2	11.3
120°-130°	654.7	9.1
130°-140°	513.7	7.1
140°-150°	394.3	5.5
150°-160°	283.9	3.9
160°-170°	173.7	2.4
170°-180°	58.7	0.8
0°-30°	711.4	9.9
0°-40°	1249.9	17.3
0°-60°	2427.4	33.7
0°-90°	3229.4	44.8
90°-120°	1902.7	26.4
90°-150°	3465.3	48.1
90°-180°	3982.0	55.2
0°-180°	7211.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	406	436	491	555	575	38
15°	304	562	947	1148	1184	85
25°	194	637	1128	1178	1179	90
35°	131	609	1062	1123	1167	82
45°	90	486	939	1076	1124	70
55°	64	308	797	926	951	59
65°	51	164	592	665	675	51
75°	38	101	325	357	358	39
85°	13	31	80	88	90	14
90°	4	12	31	16	16	4
95°	40	155	516	266	181	44
105°	142	215	870	1321	1232	150
115°	252	306	697	1390	1587	249
125°	350	393	634	1071	1264	311
135°	418	460	614	865	981	323
145°	484	515	606	738	796	303
155°	547	563	606	666	685	252
165°	591	598	606	630	638	167
175°	614	614	610	618	618	58
180°	614	614	614	614	614	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1
2.5°	417.1	417.1	419.8	421.2	423.8	425.2	427.9	430.6	438.6	439.9	442.6
5°	406.4	411.8	429.2	435.9	454.7	480.2	490.9	508.3	544.6	555.3	562.0
7.5°	390.3	402.4	445.3	456.0	503.0	570.0	598.2	635.8	693.4	721.6	744.4
10°	364.8	390.3	466.8	492.3	568.7	670.6	723.0	775.3	862.4	901.3	916.1
12.5°	336.7	378.2	489.6	524.4	634.4	783.3	846.4	904.0	1003.3	1055.6	1063.6
15°	304.5	360.8	511.0	562.0	704.2	877.2	947.0	1018.0	1110.6	1148.1	1157.5
17.5°	276.3	347.4	531.2	584.8	757.8	961.7	1032.8	1091.8	1166.9	1192.4	1199.1
20°	241.4	325.9	544.6	614.3	814.2	1023.4	1091.8	1137.4	1188.4	1204.5	1207.2
22.5°	215.9	303.1	552.6	625.0	851.7	1061.0	1118.6	1154.9	1189.7	1195.1	1196.4
25°	194.5	277.6	551.3	637.1	883.9	1083.8	1128.0	1154.9	1175.0	1177.7	1177.7
27.5°	174.4	249.5	545.9	639.8	908.1	1089.1	1124.0	1142.8	1152.2	1157.5	1157.5
30°	156.9	222.7	532.5	634.4	918.8	1083.8	1111.9	1121.3	1130.7	1138.8	1142.8
32.5°	143.5	197.2	512.4	623.7	920.1	1070.3	1090.5	1095.8	1109.2	1128.0	1134.7
35°	131.4	171.7	489.6	608.9	912.1	1048.9	1062.3	1067.7	1094.5	1122.7	1132.0
37.5°	119.4	152.9	460.1	583.5	900.0	1023.4	1032.8	1042.2	1083.8	1117.3	1128.0
40°	107.3	136.8	425.2	555.3	881.2	992.6	1000.6	1015.4	1070.3	1109.2	1120.0
42.5°	97.9	123.4	387.6	525.8	857.1	957.7	969.8	991.2	1054.3	1095.8	1107.9
45°	89.9	110.0	347.4	485.5	826.2	921.5	938.9	968.4	1035.5	1075.7	1086.4
47.5°	81.8	100.6	305.8	444.0	792.7	885.3	908.1	941.6	1010.0	1048.9	1058.3
50°	75.1	91.2	264.2	399.7	756.5	846.4	873.2	908.1	977.8	1014.0	1026.1
52.5°	69.7	83.2	225.3	355.4	714.9	806.1	837.0	873.2	938.9	973.8	981.8
55°	64.4	76.5	191.8	308.5	672.0	763.2	796.7	831.6	896.0	925.5	930.9
57.5°	61.7	71.1	163.6	264.2	626.4	714.9	752.5	784.7	845.0	867.8	873.2
60°	57.7	67.1	142.2	226.7	576.8	669.3	701.5	733.7	784.7	803.4	807.5
62.5°	53.7	64.4	126.1	190.5	525.8	615.7	647.8	677.4	720.3	733.7	739.1
65°	51.0	61.7	114.0	163.6	473.5	559.3	591.5	617.0	651.9	665.3	668.0
67.5°	48.3	59.0	104.6	140.8	421.2	503.0	527.1	551.3	578.1	591.5	592.8
70°	44.3	56.3	96.6	124.7	367.5	438.6	458.7	484.2	505.7	512.4	516.4
72.5°	41.6	52.3	91.2	112.7	312.5	376.9	395.7	410.4	429.2	435.9	435.9
75°	37.6	46.9	85.8	100.6	256.2	308.5	324.6	339.3	354.1	356.8	352.8
77.5°	33.5	41.6	73.8	84.5	199.9	244.1	257.5	265.6	277.6	280.3	281.7
80°	28.2	36.2	57.7	65.7	144.9	179.7	189.1	195.8	206.6	206.6	209.2
82.5°	21.5	28.2	41.6	46.9	97.9	123.4	131.4	135.5	142.2	142.2	142.2
85°	13.4	17.4	26.8	30.8	59.0	75.1	80.5	81.8	87.2	88.5	88.5
87.5°	6.7	9.4	17.4	18.8	30.8	38.9	38.9	41.6	41.6	40.2	38.9
90°	4.1	7.4	10.7	11.5	18.1	26.9	31.3	27.8	20.9	15.7	15.7
92.5°	16.5	44.5	72.6	79.6	111.9	154.9	176.4	154.6	111.0	78.3	75.2
95°	39.6	90.9	142.2	155.0	275.2	435.5	515.7	460.2	349.2	265.9	256.5
97.5°	68.4	113.6	158.9	170.2	370.7	638.0	771.7	736.6	666.4	613.8	595.8
100°	90.7	131.7	172.7	183.0	405.5	702.1	850.4	853.0	858.1	861.9	840.5
102.5°	109.7	148.0	186.2	195.8	421.4	722.3	872.7	917.4	1006.8	1073.8	1055.5
105°	141.8	174.2	206.7	214.8	433.3	724.6	870.2	970.4	1170.9	1321.2	1311.3
107.5°	174.8	205.0	235.2	242.8	435.4	692.3	820.7	960.5	1240.1	1449.8	1452.2
110°	197.0	224.3	251.7	258.5	432.2	663.7	779.5	935.8	1248.3	1482.7	1493.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	218.9	244.9	270.9	277.4	432.3	638.8	742.0	901.9	1221.8	1461.7	1477.5
115°	251.9	275.9	299.9	305.9	436.3	610.2	697.1	851.2	1159.3	1390.4	1412.2
117.5°	284.4	306.2	328.0	333.5	444.4	592.2	666.1	805.2	1083.3	1291.9	1316.1
120°	303.4	323.9	344.5	349.6	451.0	586.2	653.8	780.8	1034.9	1225.5	1249.0
122.5°	321.9	342.6	363.3	368.5	460.4	583.0	644.3	758.7	987.6	1159.2	1182.4
125°	350.4	369.2	388.1	392.8	473.2	580.4	634.0	731.2	925.6	1071.4	1092.8
127.5°	373.5	392.5	411.5	416.3	486.0	578.9	625.3	708.8	875.7	1000.9	1018.9
130°	385.8	406.3	426.9	432.0	495.3	579.8	622.0	696.3	844.9	956.3	973.0
132.5°	398.6	419.1	439.7	444.8	502.9	580.4	619.2	685.7	818.7	918.4	933.3
135°	417.6	436.3	454.9	459.6	511.1	579.8	614.2	669.9	781.3	864.8	877.7
137.5°	437.0	455.5	474.0	478.6	523.5	583.4	613.4	660.5	754.7	825.3	835.8
140°	453.0	470.1	487.1	491.4	531.1	584.0	610.5	651.2	732.5	793.5	803.3
142.5°	465.4	481.1	496.9	500.8	537.4	586.1	610.5	646.2	717.7	771.3	779.8
145°	484.4	498.1	511.9	515.3	545.7	586.2	606.4	635.6	694.1	737.9	744.3
147.5°	503.3	516.7	530.1	533.4	557.7	590.2	606.4	629.4	675.3	709.8	715.1
150°	515.7	527.8	539.9	542.9	564.1	592.3	606.4	625.8	664.7	693.8	698.1
152.5°	528.5	537.7	546.8	549.1	568.2	593.7	606.4	623.0	656.1	681.0	684.3
155°	547.4	554.2	561.0	562.7	577.3	596.7	606.4	619.6	645.9	665.7	667.9
157.5°	561.4	568.0	574.6	576.3	586.3	599.7	606.4	616.6	637.1	652.5	654.0
160°	570.9	576.1	581.2	582.5	590.5	601.1	606.4	615.2	632.7	645.9	646.8
162.5°	580.4	584.3	588.1	589.1	594.9	602.6	606.4	613.8	628.7	639.8	640.6
165°	590.7	594.2	597.6	598.5	601.1	604.6	606.4	611.7	622.3	630.3	631.2
167.5°	600.2	601.8	603.5	603.9	606.1	609.0	610.5	614.0	621.0	626.2	626.6
170°	606.4	608.0	609.7	610.1	610.2	610.4	610.5	614.0	621.0	626.2	626.2
172.5°	609.7	610.1	610.4	610.5	610.5	610.5	610.5	613.3	618.8	622.9	622.6
175°	614.2	614.2	614.2	614.2	613.0	611.3	610.5	612.2	615.7	618.3	618.3
177.5°	614.2	614.2	614.2	614.2	613.2	611.9	611.3	612.7	615.4	617.5	617.1
180°	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	417.1	417.1
2.5°	445.3	442.6
5°	572.7	575.4
7.5°	771.2	769.9
10°	959.0	971.1
12.5°	1095.8	1098.5
15°	1179.0	1184.4
17.5°	1211.2	1212.5
20°	1212.5	1209.8
22.5°	1197.8	1195.1
25°	1180.3	1179.0
27.5°	1164.2	1165.6
30°	1157.5	1161.6
32.5°	1157.5	1164.2
35°	1160.2	1166.9
37.5°	1158.9	1166.9
40°	1153.5	1162.9
42.5°	1138.8	1145.5
45°	1116.0	1124.0
47.5°	1086.4	1091.8
50°	1048.9	1054.3
52.5°	1001.9	1003.3
55°	945.6	951.0
57.5°	885.3	886.6
60°	818.2	822.2
62.5°	747.1	747.1
65°	672.0	674.7
67.5°	594.2	600.9
70°	515.1	516.4
72.5°	437.3	437.3
75°	356.8	358.1
77.5°	280.3	280.3
80°	207.9	209.2
82.5°	143.5	146.2
85°	89.9	89.9
87.5°	41.6	37.6
90°	15.7	15.7
92.5°	62.7	50.3
95°	218.7	181.0
97.5°	524.0	452.2
100°	755.0	669.4
102.5°	982.2	908.9
105°	1271.9	1232.5
107.5°	1461.7	1471.2
110°	1534.0	1575.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1540.5	1603.5
115°	1499.6	1587.0
117.5°	1413.1	1510.0
120°	1343.2	1437.4
122.5°	1275.3	1368.2
125°	1178.3	1263.9
127.5°	1091.1	1163.3
130°	1039.7	1106.4
132.5°	993.1	1052.8
135°	929.2	980.7
137.5°	878.0	920.1
140°	842.7	882.1
142.5°	813.6	847.5
145°	770.0	795.6
147.5°	736.4	757.7
150°	715.3	732.5
152.5°	697.3	710.3
155°	676.5	685.1
157.5°	660.1	666.1
160°	650.3	653.8
162.5°	643.9	647.2
165°	634.6	638.1
167.5°	628.0	629.5
170°	626.2	626.2
172.5°	621.3	620.0
175°	618.3	618.3
177.5°	615.7	614.2
180°	614.2	614.2



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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	2.80	3.65	3.80	4.66	6.00	15.98	16.83	16.98	17.84	19.18
	3H	3.51	4.27	4.51	5.29	6.65	17.82	18.58	18.82	19.60	20.96
	4H	3.80	4.53	4.82	5.55	6.92	18.47	19.19	19.48	20.21	21.58
	6H	4.05	4.72	5.08	5.75	7.13	18.90	19.56	19.92	20.59	21.97
	8H	4.12	4.76	5.15	5.80	7.18	19.02	19.65	20.05	20.70	22.07
	12H	4.14	4.74	5.18	5.78	7.18	19.08	19.69	20.12	20.73	22.13
4H	2H	10.02	10.74	11.04	11.76	13.13	16.26	16.98	17.28	18.00	19.37
	3H	11.58	12.19	12.62	13.24	14.62	18.30	18.91	19.33	19.96	21.34
	4H	11.68	12.23	12.72	13.28	14.68	19.07	19.62	20.11	20.66	22.07
	6H	11.69	12.17	12.74	13.23	14.63	19.60	20.08	20.65	21.15	22.55
	8H	11.66	12.11	12.72	13.17	14.59	19.77	20.21	20.82	21.27	22.69
	12H	11.62	12.03	12.69	13.10	14.52	19.86	20.26	20.93	21.34	22.76
8H	4H	13.12	13.57	14.17	14.63	16.04	19.13	19.57	20.18	20.63	22.05
	6H	13.36	13.73	14.44	14.83	16.25	19.75	20.13	20.83	21.22	22.64
	8H	13.38	13.71	14.46	14.79	16.22	19.97	20.30	21.06	21.38	22.82
	12H	13.35	13.64	14.44	14.72	16.19	20.12	20.40	21.20	21.48	22.96
12H	4H	13.26	13.67	14.33	14.74	16.16	19.08	19.48	20.15	20.55	21.98
	6H	13.62	13.95	14.70	15.03	16.46	19.74	20.06	20.82	21.15	22.58
	8H	13.69	13.98	14.78	15.06	16.53	19.97	20.25	21.05	21.33	22.81