

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: P937862

Luminaire Tested: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937862
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

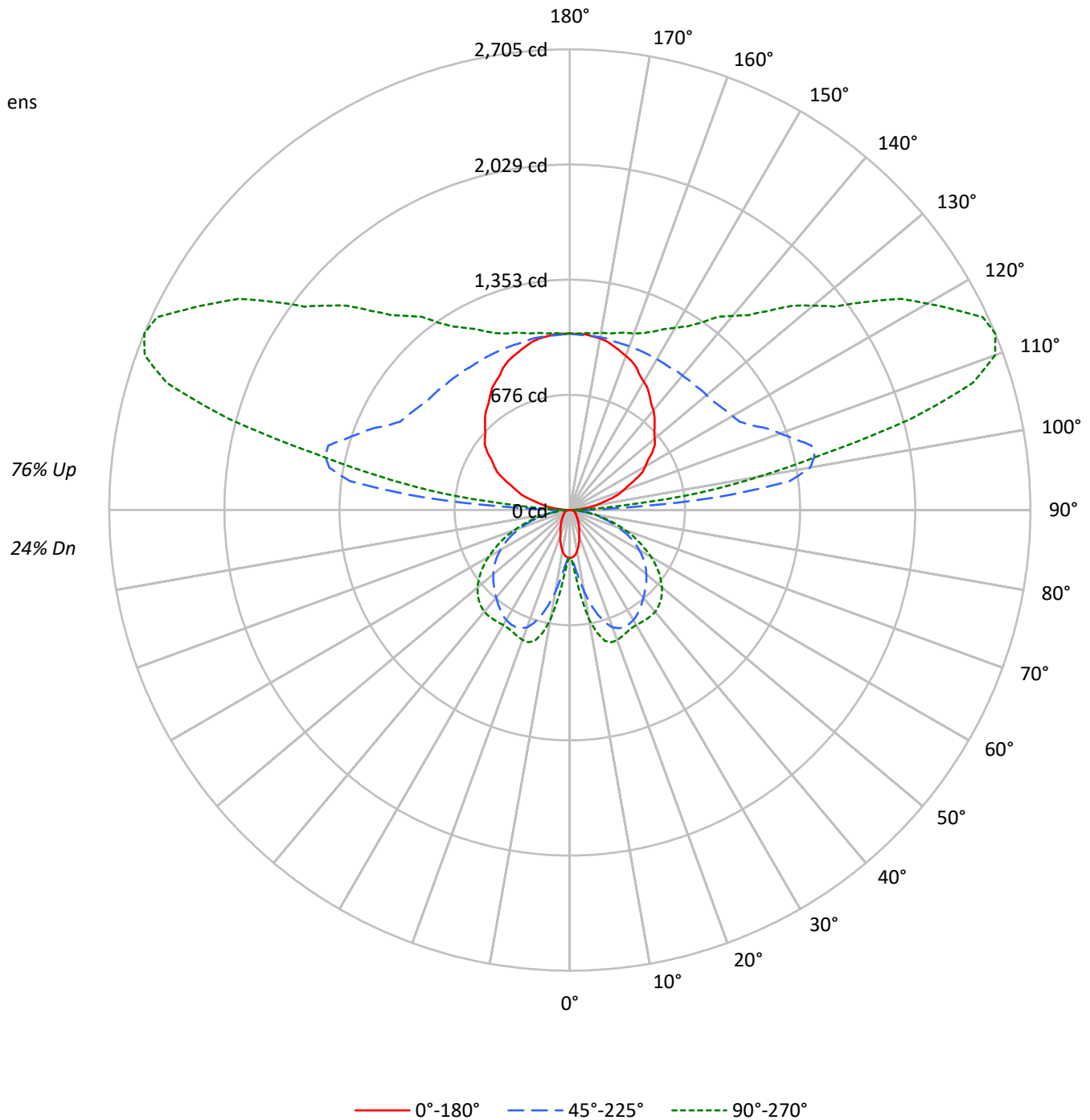
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8886.8 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 71.4
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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CATALOG NUMBER: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-6-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P937862

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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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1733	1733	1733
5°	1692	2002	2329
10°	1534	2918	3861
15°	1303	3811	4662
20°	1061	4415	4751
25°	885	4619	4655
30°	746	4647	4646
35°	659	4568	4766
40°	574	4467	4890
45°	519	4392	4910
50°	476	4325	4828
55°	455	4226	4614
60°	467	4039	4276
65°	483	3755	3811
70°	514	3273	3221
75°	567	2665	2514
80°	615	1847	1693
85°	537	979	866

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4910 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	0.4
10°-20°	160.6	1.8
20°-30°	280.9	3.2
30°-40°	361.5	4.1
40°-50°	403.8	4.5
50°-60°	386.8	4.4
60°-70°	306.5	3.4
70°-80°	180.2	2.0
80°-90°	54.0	0.6
90°-100°	505.0	5.7
100°-110°	1327.7	14.9
110°-120°	1376.7	15.5
120°-130°	1104.3	12.4
130°-140°	866.5	9.7
140°-150°	665.1	7.5
150°-160°	478.9	5.4
160°-170°	293.0	3.3
170°-180°	99.0	1.1
0°-30°	477.7	5.4
0°-40°	839.2	9.4
0°-60°	1629.8	18.3
0°-90°	2170.6	24.4
90°-120°	3209.4	36.1
90°-150°	5845.2	65.8
90°-180°	6716.0	75.6
0°-180°	8886.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	280	280	280	280	280	
5°	273	293	330	373	386	25
15°	204	377	636	771	795	57
25°	131	428	757	791	792	60
35°	88	409	713	754	784	55
45°	60	326	630	722	755	47
55°	43	207	535	621	638	39
65°	34	110	397	447	453	34
75°	25	68	218	240	240	26
85°	9	21	54	59	60	10
90°	7	19	53	26	26	6
95°	67	261	870	448	305	74
105°	239	362	1468	2228	2079	254
115°	425	516	1176	2345	2677	420
125°	591	663	1070	1807	2132	525
135°	704	775	1036	1459	1654	545
145°	817	869	1023	1245	1342	512
155°	923	949	1023	1123	1156	424
165°	996	1010	1023	1063	1076	281
175°	1036	1036	1030	1043	1043	98
180°	1036	1036	1036	1036	1036	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1
2.5°	280.1	280.1	281.8	282.7	284.6	285.5	287.3	289.1	294.5	295.4	297.2
5°	272.9	276.5	288.2	292.7	305.3	322.4	329.6	341.3	365.6	372.8	377.4
7.5°	262.1	270.2	298.9	306.2	337.7	382.7	401.6	426.9	465.6	484.5	499.9
10°	245.0	262.1	313.4	330.5	381.9	450.3	485.4	520.5	579.1	605.1	615.1
12.5°	226.1	254.0	328.7	352.1	426.0	525.9	568.3	607.0	673.6	708.7	714.1
15°	204.4	242.3	343.1	377.4	472.8	588.9	635.8	683.6	745.7	770.9	777.2
17.5°	185.5	233.2	356.6	392.7	508.8	645.7	693.4	733.1	783.5	800.6	805.1
20°	162.1	218.8	365.6	412.5	546.7	687.2	733.1	763.7	797.9	808.7	810.5
22.5°	145.0	203.5	371.0	419.6	571.8	712.3	751.1	775.3	798.8	802.4	803.3
25°	130.6	186.4	370.1	427.8	593.5	727.6	757.3	775.3	788.9	790.7	790.7
27.5°	117.1	167.5	366.5	429.6	609.7	731.3	754.7	767.3	773.5	777.2	777.2
30°	105.4	149.5	357.5	426.0	616.9	727.6	746.6	752.9	759.1	764.6	767.3
32.5°	96.3	132.4	344.0	418.7	617.8	718.7	732.2	735.8	744.7	757.3	761.9
35°	88.3	115.3	328.7	408.9	612.4	704.3	713.2	716.9	734.9	753.8	760.0
37.5°	80.1	102.7	308.9	391.8	604.2	687.2	693.4	699.8	727.6	750.2	757.3
40°	72.1	91.9	285.5	372.8	591.7	666.4	671.8	681.7	718.7	744.7	752.0
42.5°	65.7	82.8	260.3	353.0	575.4	643.0	651.1	665.5	707.8	735.8	743.8
45°	60.3	73.9	233.2	326.0	554.7	618.7	630.4	650.2	695.2	722.2	729.4
47.5°	55.0	67.5	205.3	298.0	532.3	594.4	609.7	632.2	678.1	704.3	710.5
50°	50.4	61.2	177.5	268.3	507.9	568.3	586.3	609.7	656.5	680.8	688.9
52.5°	46.8	55.9	151.3	238.7	480.0	541.2	562.0	586.3	630.4	653.8	659.2
55°	43.2	51.3	128.7	207.1	451.1	512.4	534.9	558.3	601.6	621.3	625.0
57.5°	41.5	47.7	109.9	177.5	420.5	480.0	505.2	526.8	567.4	582.7	586.3
60°	38.8	45.0	95.4	152.2	387.2	449.4	471.0	492.6	526.8	539.4	542.1
62.5°	36.0	43.2	84.7	127.9	353.0	413.4	434.9	454.8	483.6	492.6	496.2
65°	34.2	41.5	76.5	109.9	317.9	375.5	397.2	414.3	437.6	446.7	448.5
67.5°	32.4	39.7	70.3	94.5	282.7	337.7	353.9	370.1	388.1	397.2	398.1
70°	29.7	37.8	64.8	83.7	246.7	294.5	308.0	325.1	339.5	344.0	346.8
72.5°	27.9	35.1	61.2	75.7	209.9	253.0	265.6	275.6	288.2	292.7	292.7
75°	25.2	31.5	57.7	67.5	172.0	207.1	217.9	227.9	237.7	239.6	236.8
77.5°	22.5	27.9	49.5	56.8	134.2	163.9	172.9	178.3	186.4	188.2	189.1
80°	18.9	24.4	38.8	44.1	97.2	120.7	127.0	131.5	138.7	138.7	140.5
82.5°	14.4	18.9	27.9	31.5	65.7	82.8	88.3	91.0	95.4	95.4	95.4
85°	9.0	11.7	18.0	20.7	39.7	50.4	54.1	55.0	58.6	59.4	59.4
87.5°	4.5	6.3	11.7	12.6	20.7	26.1	26.1	27.9	27.9	27.0	26.1
90°	7.0	12.5	18.1	19.4	30.5	45.4	52.8	46.9	35.2	26.4	26.4
92.5°	27.8	75.1	122.4	134.2	188.6	261.3	297.6	260.8	187.3	132.1	126.9
95°	66.8	153.3	239.8	261.4	464.2	734.7	869.9	776.2	588.9	448.5	432.5
97.5°	115.4	191.7	268.1	287.1	625.3	1076.3	1301.7	1242.5	1124.2	1035.3	1005.1
100°	153.0	222.2	291.4	308.7	683.9	1184.3	1434.5	1438.8	1447.5	1453.9	1417.8
102.5°	185.0	249.5	314.2	330.3	710.9	1218.3	1472.0	1547.4	1698.2	1811.3	1780.4
105°	239.2	293.9	348.5	362.2	730.8	1222.2	1467.9	1636.9	1975.0	2228.5	2211.9
107.5°	294.8	345.8	396.8	409.5	734.5	1167.8	1384.4	1620.2	2091.8	2445.5	2449.5
110°	332.3	378.4	424.4	435.9	728.9	1119.5	1314.9	1578.4	2105.7	2501.1	2518.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	369.2	413.1	457.0	468.0	729.1	1077.4	1251.6	1521.3	2060.9	2465.6	2492.2
115°	424.8	465.3	505.9	516.0	735.9	1029.2	1175.8	1435.7	1955.5	2345.4	2382.2
117.5°	479.8	516.6	553.3	562.5	749.6	998.9	1123.6	1358.2	1827.3	2179.2	2220.0
120°	511.8	546.4	581.0	589.7	760.7	988.7	1102.8	1317.1	1745.7	2067.2	2106.9
122.5°	543.1	578.0	612.9	621.6	776.7	983.4	1086.8	1279.8	1665.8	1955.3	1994.4
125°	591.0	622.9	654.7	662.6	798.3	979.0	1069.5	1233.4	1561.2	1807.2	1843.3
127.5°	629.9	662.1	694.2	702.3	819.8	976.5	1054.9	1195.6	1477.2	1688.3	1718.7
130°	650.8	685.5	720.0	728.7	835.5	977.9	1049.2	1174.6	1425.2	1613.2	1641.3
132.5°	672.4	707.0	741.6	750.3	848.3	979.0	1044.4	1156.6	1380.9	1549.2	1574.3
135°	704.3	735.9	767.4	775.3	862.2	978.1	1036.1	1130.0	1317.9	1458.8	1480.5
137.5°	737.0	768.3	799.5	807.3	883.0	984.1	1034.6	1114.0	1272.9	1392.0	1409.8
140°	764.1	792.9	821.6	828.8	895.8	985.1	1029.8	1098.4	1235.6	1338.5	1355.1
142.5°	785.0	811.6	838.2	844.8	906.5	988.7	1029.8	1090.0	1210.6	1301.0	1315.3
145°	817.0	840.2	863.3	869.2	920.4	988.7	1022.8	1072.1	1170.7	1244.7	1255.5
147.5°	849.0	871.6	894.1	899.8	940.8	995.5	1022.8	1061.6	1139.2	1197.4	1206.3
150°	869.9	890.3	910.6	915.7	951.4	999.0	1022.8	1055.6	1121.1	1170.3	1177.5
152.5°	891.4	906.9	922.4	926.2	958.4	1001.3	1022.8	1050.7	1106.7	1148.7	1154.1
155°	923.4	934.9	946.3	949.1	973.7	1006.4	1022.8	1045.1	1089.6	1123.0	1126.7
157.5°	947.1	958.2	969.3	972.0	989.0	1011.5	1022.8	1040.1	1074.7	1100.7	1103.2
160°	963.0	971.7	980.4	982.5	995.9	1013.9	1022.8	1037.7	1067.3	1089.6	1091.0
162.5°	979.0	985.5	992.0	993.6	1003.4	1016.4	1022.8	1035.3	1060.3	1079.1	1080.6
165°	996.4	1002.3	1008.2	1009.6	1014.0	1019.8	1022.8	1031.8	1049.8	1063.2	1064.6
167.5°	1012.4	1015.2	1018.0	1018.7	1022.4	1027.3	1029.8	1035.7	1047.4	1056.2	1056.8
170°	1022.8	1025.6	1028.4	1029.1	1029.3	1029.6	1029.8	1035.7	1047.4	1056.2	1056.2
172.5°	1028.4	1029.0	1029.6	1029.8	1029.8	1029.8	1029.8	1034.4	1043.7	1050.6	1050.1
175°	1036.1	1036.1	1036.1	1036.1	1034.0	1031.2	1029.8	1032.7	1038.7	1043.0	1043.0
177.5°	1036.1	1036.1	1036.1	1036.1	1034.4	1032.2	1031.1	1033.5	1038.1	1041.6	1041.0
180°	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	280.1	280.1
2.5°	298.9	297.2
5°	384.5	386.3
7.5°	517.8	517.0
10°	643.9	652.0
12.5°	735.8	737.6
15°	791.6	795.2
17.5°	813.2	814.1
20°	814.1	812.3
22.5°	804.2	802.4
25°	792.5	791.6
27.5°	781.7	782.6
30°	777.2	779.9
32.5°	777.2	781.7
35°	779.0	783.5
37.5°	778.1	783.5
40°	774.4	780.8
42.5°	764.6	769.1
45°	749.3	754.7
47.5°	729.4	733.1
50°	704.3	707.8
52.5°	672.7	673.6
55°	634.9	638.5
57.5°	594.4	595.3
60°	549.4	552.0
62.5°	501.6	501.6
65°	451.1	452.9
67.5°	399.0	403.4
70°	345.9	346.8
72.5°	293.6	293.6
75°	239.6	240.5
77.5°	188.2	188.2
80°	139.6	140.5
82.5°	96.3	98.1
85°	60.3	60.3
87.5°	27.9	25.2
90°	26.4	26.4
92.5°	105.8	84.8
95°	368.9	305.2
97.5°	883.9	762.8
100°	1273.6	1129.3
102.5°	1656.8	1533.2
105°	2145.4	2079.0
107.5°	2465.5	2481.6
110°	2587.6	2656.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2598.5	2704.8
115°	2529.6	2677.0
117.5°	2383.5	2547.0
120°	2265.8	2424.6
122.5°	2151.1	2307.8
125°	1987.6	2131.9
127.5°	1840.5	1962.3
130°	1753.8	1866.3
132.5°	1675.1	1775.9
135°	1567.3	1654.2
137.5°	1480.8	1551.9
140°	1421.6	1488.0
142.5°	1372.4	1429.6
145°	1298.7	1342.0
147.5°	1242.2	1278.1
150°	1206.6	1235.6
152.5°	1176.1	1198.0
155°	1141.2	1155.7
157.5°	1113.4	1123.6
160°	1096.9	1102.8
162.5°	1086.1	1091.7
165°	1070.5	1076.3
167.5°	1059.2	1061.8
170°	1056.2	1056.2
172.5°	1048.0	1045.8
175°	1043.0	1043.0
177.5°	1038.6	1036.1
180°	1036.1	1036.1



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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	0.00	0.58	1.04	1.72	3.31	13.06	13.75	14.21	14.88	16.48
	3H	0.59	1.21	1.74	2.35	3.96	14.88	15.50	16.03	16.64	18.25
	4H	0.88	1.46	2.04	2.61	4.22	15.52	16.10	16.68	17.25	18.86
	6H	1.12	1.66	2.29	2.81	4.43	15.93	16.47	17.10	17.62	19.24
	8H	1.18	1.70	2.35	2.86	4.47	16.05	16.56	17.22	17.72	19.34
	12H	1.19	1.68	2.37	2.84	4.48	16.10	16.59	17.28	17.75	19.39
4H	2H	7.08	7.67	8.25	8.81	10.42	13.31	13.90	14.48	15.04	16.66
	3H	8.63	9.12	9.81	10.29	11.92	15.34	15.83	16.51	17.00	18.62
	4H	8.72	9.17	9.90	10.33	11.97	16.09	16.54	17.27	17.70	19.35
	6H	8.72	9.11	9.90	10.29	11.92	16.62	17.00	17.80	18.19	19.82
	8H	8.69	9.05	9.87	10.23	11.88	16.77	17.13	17.95	18.31	19.96
	12H	8.64	8.97	9.84	10.15	11.81	16.85	17.18	18.05	18.37	20.02
8H	4H	10.15	10.51	11.33	11.68	13.33	16.14	16.50	17.32	17.67	19.32
	6H	10.38	10.68	11.58	11.89	13.54	16.76	17.05	17.96	18.27	19.92
	8H	10.40	10.65	11.60	11.85	13.51	16.97	17.23	18.18	18.42	20.09
	12H	10.35	10.58	11.56	11.77	13.47	17.10	17.33	18.31	18.52	20.22
12H	4H	10.28	10.61	11.48	11.79	13.45	16.08	16.41	17.28	17.59	19.25
	6H	10.63	10.89	11.84	12.09	13.75	16.74	17.00	17.94	18.19	19.86
	8H	10.70	10.92	11.90	12.11	13.81	16.96	17.18	18.16	18.37	20.07