

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: P937398

Luminaire Tested: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

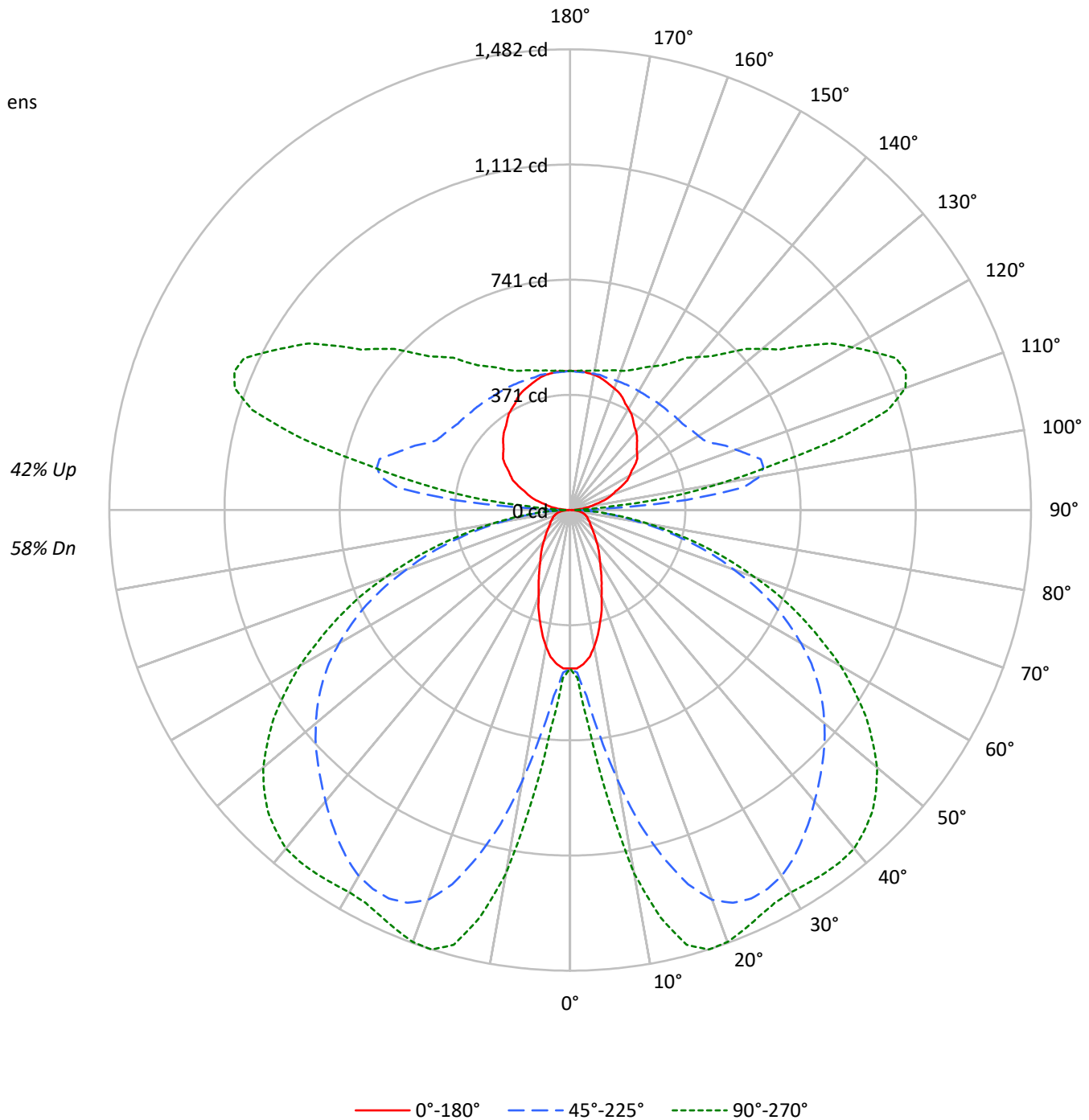
Test Method: LM-79-2019  
Report Number: P937398  
REPORT IS A COMBINATION OF REPORTS P933504 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6848.0 lumens  
Efficiency: N/A  
Efficacy: 110.5 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): 62  
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

TEST NUMBER: P937398  
CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P937398

CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**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	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63	58			
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			
9	49	36	28	23	46	34	27	22	30	24	20	26	21	17	22	18	15	13			
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			

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

	0°	45°	90°
0°	4731	4731	4731
5°	4617	5465	6360
10°	4183	7960	10544
15°	3552	10392	12732
20°	2889	12034	12976
25°	2407	12584	12713
30°	2027	12653	12689
35°	1789	12434	13016
40°	1557	12151	13355
45°	1407	11940	13407
50°	1288	11749	13186
55°	1229	11471	12601
60°	1254	10954	11678
65°	1298	10172	10410
70°	1373	8854	8795
75°	1505	7200	6863
80°	1610	4976	4625
85°	1358	2626	2368

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13407 cd/sqm



TEST NUMBER: P937398

CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.0	1.0
10°-20°	292.3	4.3
20°-30°	511.4	7.5
30°-40°	658.3	9.6
40°-50°	735.3	10.7
50°-60°	704.2	10.3
60°-70°	558.1	8.1
70°-80°	328.2	4.8
80°-90°	92.9	1.4
90°-100°	218.2	3.2
100°-110°	573.6	8.4
110°-120°	594.7	8.7
120°-130°	477.1	7.0
130°-140°	374.3	5.5
140°-150°	287.3	4.2
150°-160°	206.9	3.0
160°-170°	126.6	1.8
170°-180°	42.8	0.6
0°-30°	869.7	12.7
0°-40°	1527.9	22.3
0°-60°	2967.4	43.3
0°-90°	3946.5	57.6
90°-120°	1386.5	20.2
90°-150°	2525.2	36.9
90°-180°	2901.0	42.4
0°-180°	6848.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	497	533	600	679	703	46
15°	372	687	1158	1404	1448	104
25°	238	779	1379	1440	1441	110
35°	161	744	1299	1372	1426	100
45°	110	594	1148	1315	1374	85
55°	79	377	974	1131	1162	72
65°	62	200	723	813	825	62
75°	46	123	397	436	438	48
85°	16	38	98	108	110	17
90°	3	8	23	11	11	4
95°	29	113	376	194	132	32
105°	103	156	634	963	898	110
115°	184	223	508	1013	1156	181
125°	255	286	462	781	921	227
135°	304	335	448	630	715	235
145°	353	376	442	538	580	221
155°	399	410	442	485	499	183
165°	430	436	442	459	465	121
175°	448	448	445	451	451	42
180°	448	448	448	448	448	



TEST NUMBER: P937398  
 CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9
2.5°	509.9	509.9	513.2	514.8	518.1	519.8	523.1	526.4	536.1	537.8	541.1
5°	496.8	503.4	524.7	532.9	555.8	587.0	600.1	621.4	665.7	678.8	687.0
7.5°	477.1	491.9	544.4	557.5	614.8	696.8	731.3	777.2	847.7	882.1	910.0
10°	445.9	477.1	570.5	601.7	695.2	819.8	883.7	947.7	1054.3	1101.8	1119.9
12.5°	411.5	462.4	598.5	641.1	775.6	957.6	1034.6	1105.1	1226.5	1290.4	1300.2
15°	372.2	441.1	624.7	687.0	860.8	1072.3	1157.6	1244.5	1357.7	1403.5	1415.0
17.5°	337.8	424.7	649.3	714.9	926.4	1175.6	1262.5	1334.7	1426.5	1457.7	1465.8
20°	295.2	398.5	665.7	751.0	995.3	1251.1	1334.7	1390.4	1452.7	1472.4	1475.7
22.5°	264.0	370.5	675.5	764.1	1041.2	1296.9	1367.5	1411.7	1454.4	1461.0	1462.5
25°	237.8	339.4	673.9	778.8	1080.5	1324.8	1379.0	1411.7	1436.3	1439.6	1439.6
27.5°	213.2	304.9	667.4	782.1	1110.0	1331.4	1374.0	1397.0	1408.4	1415.0	1415.0
30°	191.9	272.2	651.0	775.6	1123.2	1324.8	1359.2	1370.7	1382.2	1392.1	1397.0
32.5°	175.5	241.0	626.4	762.4	1124.8	1308.4	1333.1	1339.5	1356.0	1379.0	1387.1
35°	160.7	209.9	598.5	744.4	1114.9	1282.2	1298.6	1305.1	1337.9	1372.4	1383.8
37.5°	145.9	186.9	562.4	713.3	1100.2	1251.1	1262.5	1274.0	1324.8	1365.8	1379.0
40°	131.2	167.2	519.8	678.8	1077.2	1213.3	1223.2	1241.2	1308.4	1356.0	1369.1
42.5°	119.7	150.9	473.8	642.7	1047.7	1170.7	1185.5	1211.7	1288.8	1339.5	1354.4
45°	109.9	134.5	424.7	593.5	1010.0	1126.5	1147.8	1183.8	1265.8	1315.0	1328.1
47.5°	100.0	123.0	373.8	542.7	969.0	1082.2	1110.0	1151.1	1234.6	1282.2	1293.7
50°	91.9	111.5	323.0	488.6	924.7	1034.6	1067.5	1110.0	1195.3	1239.5	1254.4
52.5°	85.3	101.6	275.5	434.5	873.9	985.4	1023.2	1067.5	1147.8	1190.4	1200.2
55°	78.7	93.4	234.5	377.1	821.4	933.0	973.9	1016.6	1095.3	1131.3	1137.9
57.5°	75.4	86.9	200.0	323.0	765.7	873.9	919.9	959.2	1033.0	1060.9	1067.5
60°	70.5	82.0	173.8	277.1	705.0	818.2	857.6	896.9	959.2	982.2	987.0
62.5°	65.6	78.7	154.2	232.9	642.7	752.6	792.0	828.0	880.5	896.9	903.4
65°	62.3	75.4	139.3	200.0	578.8	683.7	723.1	754.3	796.9	813.3	816.6
67.5°	59.0	72.2	127.9	172.2	514.8	614.8	644.4	673.9	706.7	723.1	724.7
70°	54.1	68.9	118.0	152.5	449.2	536.1	560.8	591.9	618.1	626.4	631.3
72.5°	50.9	64.0	111.5	137.7	382.1	460.8	483.7	501.7	524.7	532.9	532.9
75°	45.9	57.4	104.9	123.0	313.2	377.1	396.8	414.8	432.9	436.1	431.2
77.5°	41.0	50.9	90.2	103.3	244.3	298.5	314.8	324.6	339.4	342.6	344.3
80°	34.4	44.3	70.5	80.3	177.0	219.7	231.2	239.3	252.5	252.5	255.8
82.5°	26.3	34.4	50.9	57.4	119.7	150.9	160.7	165.6	173.8	173.8	173.8
85°	16.4	21.3	32.8	37.7	72.2	91.9	98.4	100.0	106.6	108.2	108.2
87.5°	8.2	11.4	21.3	23.0	37.7	47.6	47.6	50.9	50.9	49.2	47.6
90°	3.0	5.4	7.8	8.4	13.3	19.7	22.9	20.3	15.2	11.4	11.4
92.5°	12.0	32.5	52.8	57.9	81.5	112.9	128.6	112.7	80.9	57.1	54.8
95°	28.9	66.3	103.7	113.0	200.6	317.3	375.8	335.3	254.4	193.7	186.8
97.5°	49.9	82.8	115.8	124.0	270.2	464.9	562.3	536.7	485.7	447.3	434.2
100°	66.1	95.9	125.9	133.3	295.4	511.6	619.7	621.5	625.3	628.1	612.5
102.5°	79.9	107.8	135.7	142.6	307.1	526.4	636.0	668.5	733.6	782.5	769.1
105°	103.3	126.9	150.6	156.5	315.7	528.0	634.1	707.2	853.2	962.7	955.5
107.5°	127.3	149.4	171.4	176.9	317.3	504.5	598.1	699.9	903.6	1056.4	1058.1
110°	143.6	163.5	183.4	188.4	314.9	483.6	568.0	681.9	909.6	1080.4	1087.9



TEST NUMBER: P937398

CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	159.5	178.5	197.4	202.1	315.0	465.5	540.7	657.3	890.3	1065.1	1076.7
115°	183.5	201.0	218.5	222.9	317.9	444.6	507.9	620.3	844.8	1013.2	1029.1
117.5°	207.3	223.2	239.1	243.0	323.8	431.5	485.4	586.7	789.3	941.4	959.0
120°	221.1	236.0	251.0	254.8	328.6	427.1	476.4	569.0	754.2	893.0	910.2
122.5°	234.6	249.7	264.7	268.5	335.5	424.8	469.5	552.8	719.6	844.7	861.6
125°	255.3	269.1	282.9	286.2	344.9	423.0	462.0	532.9	674.5	780.7	796.3
127.5°	272.2	286.0	299.9	303.4	354.2	421.9	455.7	516.6	638.2	729.4	742.5
130°	281.2	296.1	311.0	314.8	361.0	422.5	453.3	507.5	615.7	696.9	709.0
132.5°	290.5	305.4	320.4	324.1	366.5	423.0	451.2	499.6	596.6	669.3	680.1
135°	304.3	317.8	331.5	334.9	372.5	422.6	447.6	488.2	569.4	630.2	639.6
137.5°	318.4	331.9	345.4	348.7	381.5	425.2	447.0	481.3	549.9	601.4	609.0
140°	330.1	342.5	354.9	358.0	387.0	425.6	444.9	474.5	533.7	578.2	585.4
142.5°	339.2	350.6	362.0	364.9	391.6	427.1	444.9	470.9	523.0	562.0	568.2
145°	352.9	363.0	373.0	375.5	397.6	427.1	441.9	463.2	505.7	537.7	542.3
147.5°	366.8	376.5	386.2	388.7	406.4	430.0	441.9	458.6	492.2	517.3	521.1
150°	375.8	384.6	393.4	395.6	411.0	431.6	441.9	456.0	484.3	505.5	508.6
152.5°	385.1	391.8	398.5	400.1	414.1	432.6	441.9	454.0	478.1	496.2	498.6
155°	398.9	403.9	408.7	410.0	420.6	434.8	441.9	451.5	470.6	485.1	486.6
157.5°	409.1	414.0	418.8	420.0	427.2	437.0	441.9	449.3	464.2	475.5	476.6
160°	416.0	419.8	423.5	424.4	430.2	438.0	441.9	448.3	461.1	470.7	471.3
162.5°	423.0	425.8	428.6	429.3	433.4	439.1	441.9	447.3	458.0	466.2	466.8
165°	430.4	432.9	435.5	436.1	438.1	440.6	441.9	445.7	453.5	459.3	460.0
167.5°	437.3	438.5	439.7	440.0	441.7	443.8	444.9	447.4	452.5	456.3	456.6
170°	441.9	443.0	444.3	444.6	444.7	444.8	444.9	447.4	452.5	456.3	456.3
172.5°	444.3	444.6	444.8	444.9	444.9	444.9	444.9	446.9	450.9	453.9	453.7
175°	447.6	447.6	447.6	447.6	446.7	445.4	444.9	446.1	448.6	450.6	450.6
177.5°	447.6	447.6	447.6	447.6	446.9	445.9	445.4	446.4	448.5	450.0	449.7
180°	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6



TEST NUMBER: P937398

CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	509.9	509.9
2.5°	544.4	541.1
5°	700.1	703.4
7.5°	942.8	941.2
10°	1172.3	1187.1
12.5°	1339.5	1342.8
15°	1441.3	1447.8
17.5°	1480.6	1482.3
20°	1482.3	1479.0
22.5°	1464.2	1461.0
25°	1442.8	1441.3
27.5°	1423.2	1424.8
30°	1415.0	1420.0
32.5°	1415.0	1423.2
35°	1418.3	1426.5
37.5°	1416.7	1426.5
40°	1410.1	1421.5
42.5°	1392.1	1400.2
45°	1364.2	1374.0
47.5°	1328.1	1334.7
50°	1282.2	1288.8
52.5°	1224.8	1226.5
55°	1155.9	1162.5
57.5°	1082.2	1083.8
60°	1000.2	1005.1
62.5°	913.3	913.3
65°	821.4	824.7
67.5°	726.4	734.6
70°	629.7	631.3
72.5°	534.5	534.5
75°	436.1	437.8
77.5°	342.6	342.6
80°	254.2	255.8
82.5°	175.5	178.7
85°	109.9	109.9
87.5°	50.9	45.9
90°	11.4	11.4
92.5°	45.7	36.6
95°	159.4	131.9
97.5°	381.9	329.6
100°	550.2	487.8
102.5°	715.7	662.3
105°	926.8	898.2
107.5°	1065.1	1072.1
110°	1117.8	1147.8





TEST NUMBER: P937398

CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1122.6	1168.5
115°	1092.8	1156.5
117.5°	1029.7	1100.3
120°	978.8	1047.4
122.5°	929.3	997.0
125°	858.6	920.9
127.5°	795.1	847.7
130°	757.7	806.2
132.5°	723.6	767.2
135°	677.1	714.6
137.5°	639.7	670.5
140°	614.2	642.8
142.5°	592.8	617.5
145°	561.1	579.8
147.5°	536.6	552.1
150°	521.2	533.8
152.5°	508.0	517.5
155°	492.9	499.2
157.5°	481.0	485.4
160°	473.8	476.4
162.5°	469.2	471.6
165°	462.5	465.0
167.5°	457.7	458.7
170°	456.3	456.3
172.5°	452.7	451.7
175°	450.6	450.6
177.5°	448.6	447.6
180°	447.6	447.6



TEST NUMBER: P937398  
 CATALOG NUMBER: SQ4-FB-075U-125D-B35-1D-UNV-STD-W-4

**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	7.06	8.04	7.94	8.94	10.10	20.20	21.18	21.08	22.08	23.24
	3H	7.77	8.66	8.66	9.57	10.75	22.03	22.91	22.92	23.83	25.01
	4H	8.08	8.91	8.98	9.83	11.02	22.67	23.51	23.58	24.43	25.62
	6H	8.33	9.11	9.25	10.03	11.24	23.09	23.87	24.01	24.79	26.00
	8H	8.41	9.14	9.33	10.09	11.29	23.21	23.95	24.14	24.89	26.10
	12H	8.43	9.13	9.36	10.07	11.30	23.28	23.98	24.21	24.92	26.15
4H	2H	14.26	15.10	15.18	16.02	17.21	20.49	21.32	21.40	22.24	23.43
	3H	15.84	16.54	16.77	17.50	18.70	22.53	23.23	23.45	24.18	25.39
	4H	15.94	16.58	16.88	17.53	18.76	23.29	23.93	24.23	24.88	26.11
	6H	15.96	16.52	16.91	17.49	18.72	23.82	24.38	24.77	25.35	26.58
	8H	15.94	16.46	16.89	17.43	18.67	23.98	24.50	24.93	25.47	26.71
	12H	15.91	16.37	16.88	17.36	18.61	24.07	24.54	25.05	25.52	26.77
8H	4H	17.39	17.91	18.34	18.87	20.12	23.36	23.88	24.31	24.85	26.09
	6H	17.64	18.07	18.61	19.07	20.32	23.98	24.41	24.96	25.42	26.66
	8H	17.66	18.04	18.64	19.03	20.29	24.20	24.58	25.18	25.57	26.83
	12H	17.63	17.97	18.62	18.96	20.26	24.34	24.68	25.33	25.66	26.97
12H	4H	17.54	18.00	18.51	18.99	20.24	23.32	23.79	24.29	24.77	26.02
	6H	17.89	18.27	18.88	19.27	20.53	23.97	24.35	24.96	25.35	26.61
	8H	17.97	18.30	18.96	19.29	20.60	24.20	24.53	25.19	25.52	26.83