

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: P937774

Luminaire Tested: SQ4-FB-100U-125D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937774
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

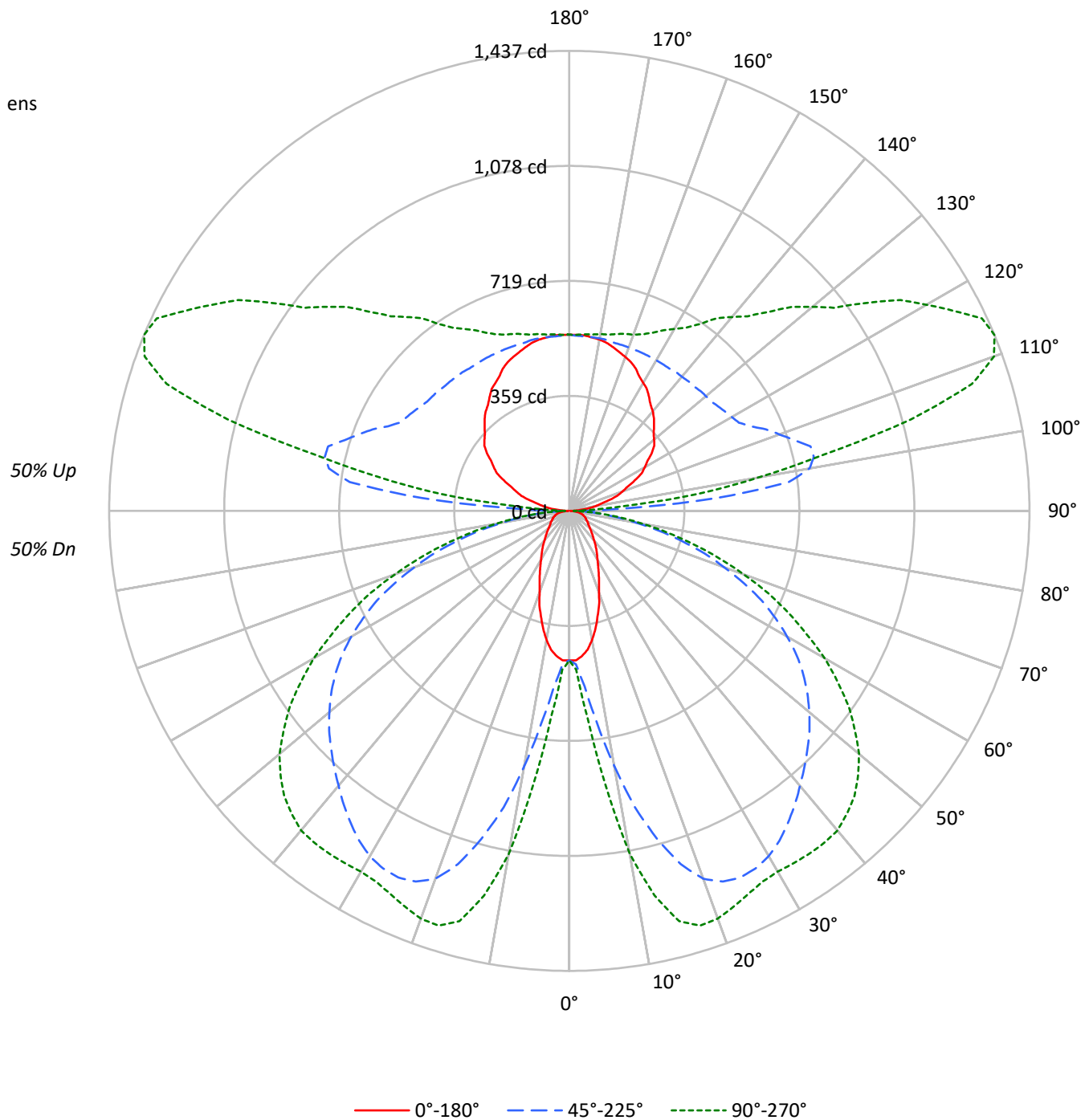
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7184.8 lumens
Efficiency: N/A
Efficacy: 104.4 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: General Diffuse

Input Watts (W): 68.8
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4336	4336	4336
5°	4232	5008	5828
10°	3834	7295	9663
15°	3255	9523	11668
20°	2647	11028	11892
25°	2205	11532	11650
30°	1857	11596	11628
35°	1639	11394	11928
40°	1426	11134	12239
45°	1289	10941	12287
50°	1180	10766	12083
55°	1126	10513	11548
60°	1149	10038	10702
65°	1190	9321	9540
70°	1259	8113	8059
75°	1381	6597	6290
80°	1474	4560	4238
85°	1242	2405	2170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12287 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	0.8
10°-20°	267.9	3.7
20°-30°	468.6	6.5
30°-40°	603.2	8.4
40°-50°	673.8	9.4
50°-60°	645.3	9.0
60°-70°	511.4	7.1
70°-80°	300.7	4.2
80°-90°	85.7	1.2
90°-100°	268.3	3.7
100°-110°	705.3	9.8
110°-120°	731.3	10.2
120°-130°	586.6	8.2
130°-140°	460.3	6.4
140°-150°	353.3	4.9
150°-160°	254.4	3.5
160°-170°	155.7	2.2
170°-180°	52.6	0.7
0°-30°	797.0	11.1
0°-40°	1400.2	19.5
0°-60°	2719.3	37.8
0°-90°	3617.2	50.3
90°-120°	1704.8	23.7
90°-150°	3105.0	43.2
90°-180°	3568.0	49.7
0°-180°	7184.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	467	467	467	467	467	
5°	455	488	550	622	645	42
15°	341	630	1061	1286	1327	95
25°	218	714	1264	1319	1321	100
35°	147	682	1190	1258	1307	92
45°	101	544	1052	1205	1259	78
55°	72	346	892	1037	1065	66
65°	57	183	663	745	756	57
75°	42	113	364	400	401	44
85°	15	34	90	99	101	16
90°	4	10	28	14	14	4
95°	35	139	462	238	162	39
105°	127	192	780	1184	1104	135
115°	226	274	625	1246	1422	223
125°	314	352	568	960	1132	279
135°	374	412	550	775	879	289
145°	434	462	543	661	713	272
155°	490	504	543	596	614	225
165°	529	536	543	565	572	149
175°	550	550	547	554	554	52
180°	550	550	550	550	550	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3	467.3
2.5°	467.3	467.3	470.3	471.8	474.8	476.3	479.3	482.4	491.3	492.8	495.9
5°	455.3	461.3	480.9	488.3	509.4	538.0	549.9	569.5	610.1	622.0	629.6
7.5°	437.3	450.7	498.9	510.9	563.4	638.6	670.2	712.3	776.8	808.3	833.9
10°	408.7	437.3	522.9	551.4	637.1	751.2	809.9	868.5	966.1	1009.7	1026.3
12.5°	377.1	423.8	548.4	587.5	710.8	877.5	948.1	1012.8	1123.9	1182.5	1191.5
15°	341.1	404.2	572.5	629.6	788.8	982.7	1060.8	1140.5	1244.2	1286.2	1296.7
17.5°	309.6	389.2	595.0	655.2	848.9	1077.3	1157.0	1223.1	1307.2	1335.8	1343.3
20°	270.5	365.1	610.1	688.2	912.1	1146.5	1223.1	1274.2	1331.3	1349.3	1352.3
22.5°	241.9	339.6	619.0	700.2	954.2	1188.5	1253.1	1293.7	1332.8	1338.8	1340.3
25°	217.9	311.1	617.6	713.7	990.2	1214.1	1263.7	1293.7	1316.3	1319.3	1319.3
27.5°	195.4	279.5	611.6	716.7	1017.2	1220.1	1259.2	1280.2	1290.7	1296.7	1296.7
30°	175.8	249.4	596.6	710.8	1029.3	1214.1	1245.6	1256.2	1266.6	1275.7	1280.2
32.5°	160.8	220.8	574.0	698.7	1030.8	1199.1	1221.6	1227.6	1242.7	1263.7	1271.2
35°	147.2	192.3	548.4	682.2	1021.7	1175.0	1190.0	1196.0	1226.1	1257.7	1268.2
37.5°	133.7	171.3	515.4	653.7	1008.2	1146.5	1157.0	1167.5	1214.1	1251.6	1263.7
40°	120.2	153.3	476.3	622.0	987.2	1111.9	1120.9	1137.4	1199.1	1242.7	1254.7
42.5°	109.7	138.3	434.2	589.0	960.1	1072.9	1086.4	1110.4	1181.0	1227.6	1241.2
45°	100.7	123.3	389.2	543.9	925.6	1032.3	1051.8	1084.9	1160.0	1205.1	1217.1
47.5°	91.6	112.7	342.6	497.4	888.0	991.7	1017.2	1054.9	1131.4	1175.0	1185.6
50°	84.2	102.2	296.0	447.7	847.4	948.1	978.2	1017.2	1095.3	1135.9	1149.5
52.5°	78.1	93.2	252.5	398.2	800.9	903.0	937.6	978.2	1051.8	1090.9	1099.9
55°	72.1	85.6	214.9	345.6	752.8	855.0	892.5	931.6	1003.7	1036.7	1042.8
57.5°	69.1	79.7	183.3	296.0	701.7	800.9	843.0	879.0	946.6	972.2	978.2
60°	64.6	75.1	159.3	254.0	646.1	749.8	785.9	821.9	879.0	900.1	904.5
62.5°	60.1	72.1	141.3	213.4	589.0	689.7	725.8	758.8	806.9	821.9	827.9
65°	57.1	69.1	127.7	183.3	530.4	626.6	662.6	691.2	730.3	745.3	748.3
67.5°	54.1	66.2	117.2	157.8	471.8	563.4	590.5	617.6	647.6	662.6	664.1
70°	49.6	63.1	108.2	139.8	411.7	491.3	513.9	542.4	566.5	574.0	578.5
72.5°	46.6	58.6	102.2	126.2	350.1	422.2	443.3	459.8	480.9	488.3	488.3
75°	42.1	52.6	96.2	112.7	287.0	345.6	363.6	380.2	396.7	399.7	395.2
77.5°	37.6	46.6	82.7	94.7	223.9	273.5	288.5	297.5	311.1	314.0	315.5
80°	31.5	40.6	64.6	73.6	162.2	201.3	211.9	219.3	231.4	231.4	234.4
82.5°	24.1	31.5	46.6	52.6	109.7	138.3	147.2	151.8	159.3	159.3	159.3
85°	15.0	19.5	30.0	34.5	66.2	84.2	90.1	91.6	97.7	99.2	99.2
87.5°	7.5	10.5	19.5	21.0	34.5	43.6	43.6	46.6	46.6	45.1	43.6
90°	3.7	6.7	9.6	10.3	16.3	24.2	28.1	25.0	18.7	14.0	14.0
92.5°	14.7	39.9	65.0	71.3	100.3	138.8	158.1	138.5	99.5	70.2	67.4
95°	35.4	81.4	127.4	138.9	246.6	390.2	462.0	412.3	312.8	238.3	229.8
97.5°	61.3	101.9	142.4	152.6	332.2	571.7	691.4	660.0	597.1	549.9	533.9
100°	81.3	118.0	154.8	164.0	363.4	629.1	762.0	764.3	768.8	772.3	753.1
102.5°	98.2	132.6	166.9	175.5	377.7	647.2	782.0	822.0	902.1	962.1	945.7
105°	127.1	156.1	185.1	192.4	388.2	649.2	779.8	869.5	1049.1	1183.8	1175.0
107.5°	156.6	183.7	210.8	217.6	390.2	620.3	735.4	860.6	1111.2	1299.1	1301.2
110°	176.5	201.0	225.5	231.6	387.2	594.7	698.4	838.4	1118.5	1328.5	1337.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	196.2	219.4	242.7	248.6	387.3	572.3	664.8	808.2	1094.7	1309.7	1323.8
115°	225.6	247.1	268.6	274.0	390.9	546.7	624.6	762.7	1038.8	1245.9	1265.4
117.5°	254.9	274.4	293.9	298.8	398.2	530.7	596.9	721.5	970.7	1157.6	1179.3
120°	271.8	290.2	308.6	313.2	404.0	525.3	585.8	699.7	927.3	1098.1	1119.2
122.5°	288.5	307.1	325.6	330.2	412.6	522.4	577.3	679.8	884.8	1038.6	1059.4
125°	314.0	330.9	347.7	352.0	424.0	520.0	568.1	655.2	829.3	959.9	979.1
127.5°	334.6	351.6	368.8	373.0	435.5	518.7	560.3	635.1	784.6	896.8	913.0
130°	345.7	364.1	382.5	387.1	443.8	519.6	557.4	624.0	757.1	856.9	871.8
132.5°	357.2	375.5	393.9	398.5	450.6	520.0	554.7	614.3	733.5	822.9	836.3
135°	374.2	390.9	407.7	411.9	458.0	519.6	550.4	600.3	700.0	774.9	786.4
137.5°	391.5	408.1	424.6	428.8	469.0	522.8	549.6	591.8	676.1	739.4	748.9
140°	405.9	421.2	436.5	440.3	475.9	523.3	547.0	583.4	656.3	711.0	719.8
142.5°	417.0	431.1	445.2	448.8	481.6	525.2	547.0	579.0	643.0	691.0	698.7
145°	434.0	446.3	458.6	461.7	488.9	525.3	543.4	569.6	621.9	661.1	666.9
147.5°	451.0	463.0	474.9	477.9	499.8	528.8	543.4	564.0	605.2	636.1	640.9
150°	462.0	472.9	483.7	486.4	505.4	530.8	543.4	560.8	595.5	621.6	625.4
152.5°	473.5	481.7	489.9	492.0	509.1	531.9	543.4	558.2	587.9	610.1	613.1
155°	490.5	496.6	502.7	504.2	517.3	534.7	543.4	555.2	578.8	596.5	598.4
157.5°	503.1	509.0	514.9	516.4	525.3	537.3	543.4	552.5	570.9	584.7	586.0
160°	511.6	516.2	520.7	521.9	529.1	538.6	543.4	551.3	567.0	578.8	579.6
162.5°	520.0	523.5	526.9	527.8	533.0	539.9	543.4	550.0	563.3	573.2	573.9
165°	529.2	532.4	535.5	536.3	538.7	541.8	543.4	548.2	557.7	564.8	565.6
167.5°	537.8	539.3	540.8	541.1	543.1	545.7	547.0	550.1	556.3	561.0	561.4
170°	543.4	544.8	546.3	546.7	546.7	546.9	547.0	550.1	556.3	561.0	561.0
172.5°	546.3	546.7	546.9	547.0	547.0	547.0	547.0	549.5	554.4	558.1	557.8
175°	550.4	550.4	550.4	550.4	549.2	547.7	547.0	548.6	551.7	554.0	554.0
177.5°	550.4	550.4	550.4	550.4	549.5	548.3	547.7	549.0	551.4	553.3	553.0
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	467.3	467.3
2.5°	498.9	495.9
5°	641.6	644.6
7.5°	864.0	862.5
10°	1074.3	1087.9
12.5°	1227.6	1230.6
15°	1320.8	1326.8
17.5°	1356.9	1358.4
20°	1358.4	1355.4
22.5°	1341.8	1338.8
25°	1322.2	1320.8
27.5°	1304.2	1305.7
30°	1296.7	1301.3
32.5°	1296.7	1304.2
35°	1299.8	1307.2
37.5°	1298.3	1307.2
40°	1292.2	1302.7
42.5°	1275.7	1283.2
45°	1250.1	1259.2
47.5°	1217.1	1223.1
50°	1175.0	1181.0
52.5°	1122.4	1123.9
55°	1059.3	1065.3
57.5°	991.7	993.2
60°	916.6	921.1
62.5°	836.9	836.9
65°	752.8	755.8
67.5°	665.6	673.2
70°	577.0	578.5
72.5°	489.8	489.8
75°	399.7	401.2
77.5°	314.0	314.0
80°	232.9	234.4
82.5°	160.8	163.7
85°	100.7	100.7
87.5°	46.6	42.1
90°	14.0	14.0
92.5°	56.2	45.0
95°	196.0	162.1
97.5°	469.5	405.2
100°	676.5	599.8
102.5°	880.1	814.5
105°	1139.7	1104.4
107.5°	1309.7	1318.2
110°	1374.5	1411.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1380.3	1436.8
115°	1343.7	1422.0
117.5°	1266.1	1353.0
120°	1203.6	1288.0
122.5°	1142.7	1225.9
125°	1055.7	1132.5
127.5°	977.7	1042.3
130°	931.6	991.4
132.5°	889.8	943.3
135°	832.5	878.7
137.5°	786.7	824.4
140°	755.2	790.4
142.5°	729.0	759.4
145°	689.9	712.9
147.5°	659.9	678.9
150°	640.9	656.3
152.5°	624.7	636.4
155°	606.1	613.9
157.5°	591.5	596.9
160°	582.7	585.8
162.5°	576.9	579.9
165°	568.7	571.8
167.5°	562.6	564.0
170°	561.0	561.0
172.5°	556.7	555.5
175°	554.0	554.0
177.5°	551.7	550.4
180°	550.4	550.4



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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	6.12	7.02	7.07	7.99	9.25	19.26	20.16	20.20	21.13	22.39
	3H	6.83	7.64	7.79	8.62	9.90	21.09	21.90	22.04	22.87	24.16
	4H	7.13	7.90	8.10	8.88	10.17	21.72	22.49	22.69	23.47	24.77
	6H	7.38	8.09	8.37	9.08	10.39	22.14	22.85	23.13	23.84	25.15
	8H	7.45	8.13	8.44	9.13	10.44	22.26	22.94	23.25	23.94	25.24
	12H	7.47	8.12	8.47	9.11	10.44	22.32	22.97	23.32	23.96	25.29
4H	2H	13.32	14.08	14.29	15.07	16.36	19.54	20.31	20.52	21.29	22.58
	3H	14.89	15.53	15.88	16.54	17.85	21.57	22.22	22.56	23.23	24.54
	4H	14.99	15.58	15.98	16.58	17.91	22.33	22.92	23.33	23.93	25.26
	6H	15.00	15.51	16.01	16.54	17.87	22.86	23.37	23.87	24.40	25.73
	8H	14.98	15.45	15.99	16.47	17.82	23.02	23.49	24.03	24.51	25.86
	12H	14.94	15.37	15.97	16.40	17.75	23.11	23.54	24.13	24.57	25.92
8H	4H	16.42	16.90	17.43	17.92	19.27	22.40	22.87	23.41	23.89	25.24
	6H	16.67	17.06	17.70	18.13	19.47	23.02	23.41	24.05	24.47	25.81
	8H	16.69	17.04	17.73	18.08	19.44	23.23	23.58	24.27	24.62	25.99
	12H	16.66	16.96	17.71	18.01	19.41	23.37	23.67	24.41	24.72	26.12
12H	4H	16.57	17.00	17.60	18.03	19.38	22.35	22.78	23.38	23.82	25.17
	6H	16.92	17.27	17.97	18.32	19.68	23.00	23.35	24.04	24.40	25.76
	8H	17.00	17.30	18.04	18.34	19.75	23.22	23.53	24.27	24.57	25.98