

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: P936766

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936766
REPORT IS A COMBINATION OF REPORTS P933486 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

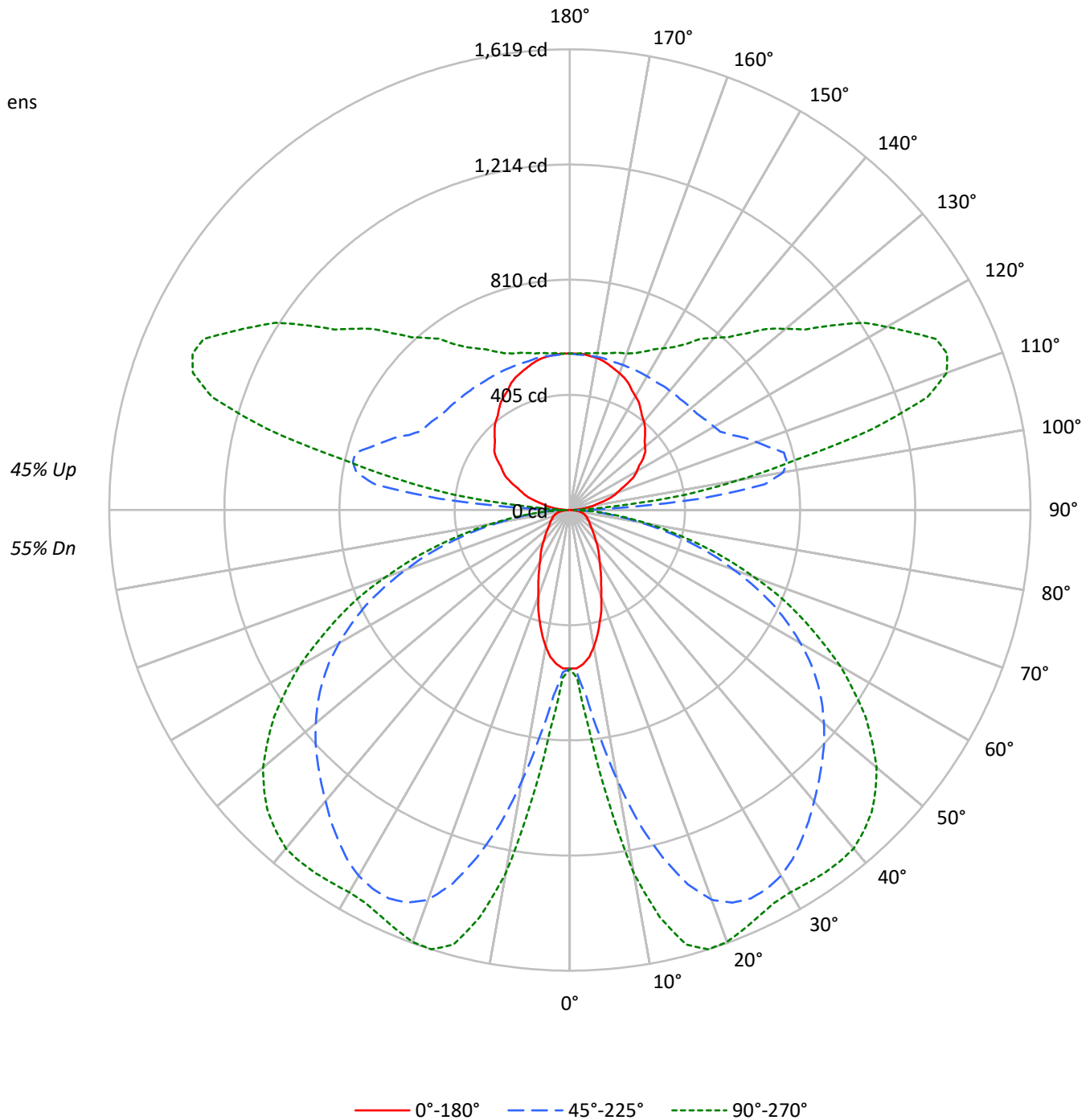
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7875.1 lumens
Efficiency: N/A
Efficacy: 108.2 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): 72.8
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

TEST NUMBER: P936766
CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2584	2584	2584
5°	2524	2986	3473
10°	2289	4353	5758
15°	1946	5688	6953
20°	1584	6591	7086
25°	1321	6897	6942
30°	1114	6941	6929
35°	985	6826	7108
40°	858	6676	7293
45°	778	6566	7321
50°	713	6467	7200
55°	683	6323	6881
60°	699	6045	6377
65°	727	5623	5685
70°	775	4903	4802
75°	858	3998	3748
80°	938	2773	2525
85°	834	1470	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7321 cd/sqm



TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	0.9
10°-20°	319.3	4.1
20°-30°	558.5	7.1
30°-40°	718.9	9.1
40°-50°	803.0	10.2
50°-60°	769.1	9.8
60°-70°	609.5	7.7
70°-80°	358.4	4.6
80°-90°	101.7	1.3
90°-100°	268.0	3.4
100°-110°	704.7	8.9
110°-120°	730.7	9.3
120°-130°	586.1	7.4
130°-140°	459.9	5.8
140°-150°	353.0	4.5
150°-160°	254.2	3.2
160°-170°	155.5	2.0
170°-180°	52.6	0.7
0°-30°	949.8	12.1
0°-40°	1668.7	21.2
0°-60°	3240.8	41.2
0°-90°	4310.3	54.7
90°-120°	1703.5	21.6
90°-150°	3102.5	39.4
90°-180°	3565.0	45.3
0°-180°	7875.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	557	557	557	557	557	
5°	543	582	655	741	768	50
15°	406	750	1264	1533	1581	113
25°	260	850	1506	1572	1574	120
35°	176	813	1418	1499	1558	110
45°	120	648	1254	1436	1501	93
55°	86	412	1064	1236	1270	78
65°	68	218	790	888	901	67
75°	50	134	433	476	478	52
85°	18	41	107	118	120	19
90°	4	10	28	14	14	4
95°	36	139	462	238	162	39
105°	127	192	779	1183	1104	135
115°	226	274	624	1245	1421	223
125°	314	352	568	959	1132	279
135°	374	412	550	774	878	289
145°	434	461	543	661	712	272
155°	490	504	543	596	613	225
165°	529	536	543	564	571	149
175°	550	550	547	554	554	52
180°	550	550	550	550	550	



TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9	556.9
2.5°	556.9	556.9	560.5	562.3	565.8	567.6	571.2	574.8	585.5	587.3	590.9
5°	542.6	549.7	573.0	582.0	607.0	641.0	655.4	678.6	727.0	741.3	750.3
7.5°	521.1	537.2	594.5	608.8	671.5	761.0	798.6	848.8	925.8	963.4	993.8
10°	487.0	521.1	623.1	657.2	759.2	895.3	965.1	1035.1	1151.5	1203.4	1223.1
12.5°	449.4	505.0	653.6	700.1	847.0	1045.8	1130.0	1207.0	1339.5	1409.3	1420.1
15°	406.5	481.7	682.2	750.3	940.1	1171.2	1264.3	1359.2	1482.7	1532.9	1545.4
17.5°	368.9	463.8	709.1	780.7	1011.7	1284.0	1378.9	1457.7	1557.9	1592.0	1600.9
20°	322.3	435.1	727.0	820.1	1087.0	1366.3	1457.7	1518.5	1586.6	1608.1	1611.7
22.5°	288.3	404.7	737.7	834.4	1137.1	1416.5	1493.5	1541.8	1588.4	1595.5	1597.3
25°	259.6	370.7	735.9	850.5	1180.1	1446.9	1506.0	1541.8	1568.7	1572.3	1572.3
27.5°	232.8	333.1	728.8	854.1	1212.3	1454.1	1500.6	1525.7	1538.2	1545.4	1545.4
30°	209.5	297.2	710.9	847.0	1226.7	1446.9	1484.5	1497.1	1509.6	1520.3	1525.7
32.5°	191.6	263.2	684.0	832.6	1228.5	1429.0	1455.9	1463.0	1480.9	1506.0	1515.0
35°	175.5	229.2	653.6	812.9	1217.7	1400.4	1418.3	1425.4	1461.2	1498.8	1511.4
37.5°	159.4	204.1	614.2	778.9	1201.6	1366.3	1378.9	1391.4	1446.9	1491.7	1506.0
40°	143.2	182.6	567.6	741.3	1176.5	1325.2	1335.9	1355.6	1429.0	1480.9	1495.3
42.5°	130.7	164.7	517.5	701.9	1144.3	1278.6	1294.7	1323.4	1407.5	1463.0	1479.1
45°	120.0	146.8	463.8	648.2	1103.1	1230.2	1253.5	1292.9	1382.5	1436.2	1450.5
47.5°	109.2	134.3	408.3	592.7	1058.3	1181.9	1212.3	1257.1	1348.4	1400.4	1412.9
50°	100.3	121.8	352.8	533.6	1009.9	1130.0	1165.8	1212.3	1305.5	1353.8	1369.9
52.5°	93.1	111.0	300.8	474.5	954.4	1076.3	1117.4	1165.8	1253.5	1300.1	1310.8
55°	85.9	102.1	256.1	411.8	897.1	1019.0	1063.7	1110.3	1196.2	1235.6	1242.8
57.5°	82.4	94.9	218.5	352.8	836.2	954.4	1004.5	1047.6	1128.2	1158.6	1165.8
60°	77.0	89.5	189.8	302.6	770.0	893.5	936.5	979.5	1047.6	1072.7	1078.0
62.5°	71.6	85.9	168.3	254.3	701.9	821.9	864.9	904.3	961.6	979.5	986.6
65°	68.0	82.4	152.2	218.5	632.1	746.7	789.7	823.7	870.2	888.1	891.7
67.5°	64.5	78.8	139.7	188.0	562.3	671.5	703.7	735.9	771.8	789.7	791.5
70°	59.1	75.2	128.9	166.5	490.6	585.5	612.4	646.4	675.1	684.0	689.4
72.5°	55.5	69.8	121.8	150.4	417.2	503.2	528.2	547.9	573.0	582.0	582.0
75°	50.1	62.7	114.6	134.3	342.0	411.8	433.3	453.0	472.7	476.3	470.9
77.5°	44.8	55.5	98.5	112.8	266.8	325.9	343.8	354.5	370.7	374.2	376.0
80°	37.6	48.3	77.0	87.7	193.4	239.9	252.5	261.4	275.8	275.8	279.3
82.5°	28.6	37.6	55.5	62.7	130.7	164.7	175.5	180.9	189.8	189.8	189.8
85°	17.9	23.3	35.8	41.2	78.8	100.3	107.4	109.2	116.4	118.2	118.2
87.5°	9.0	12.5	23.3	25.1	41.2	51.9	51.9	55.5	55.5	53.7	51.9
90°	3.7	6.6	9.6	10.3	16.2	24.1	28.0	24.9	18.7	14.1	14.1
92.5°	14.8	39.8	65.0	71.3	100.2	138.7	157.9	138.4	99.4	70.1	67.3
95°	35.5	81.4	127.3	138.8	246.4	389.9	461.7	412.0	312.6	238.1	229.6
97.5°	61.2	101.7	142.3	152.4	331.9	571.2	690.9	659.5	596.6	549.5	533.4
100°	81.2	117.9	154.6	163.8	363.0	628.6	761.4	763.7	768.3	771.7	752.5
102.5°	98.2	132.5	166.7	175.3	377.3	646.7	781.3	821.4	901.4	961.4	945.0
105°	127.0	156.0	185.1	192.3	387.9	648.7	779.1	868.8	1048.3	1182.9	1174.0
107.5°	156.5	183.5	210.6	217.4	389.8	619.8	734.8	859.9	1110.3	1298.0	1300.2
110°	176.4	200.8	225.4	231.4	387.0	594.2	697.9	837.8	1117.6	1327.5	1336.7



TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	196.0	219.3	242.5	248.4	387.0	571.9	664.3	807.5	1093.9	1308.7	1322.8
115°	225.5	247.0	268.5	273.9	390.6	546.3	624.1	762.1	1037.9	1244.8	1264.4
117.5°	254.6	274.1	293.7	298.6	397.9	530.2	596.4	720.9	969.9	1156.7	1178.3
120°	271.6	290.0	308.4	313.0	403.8	524.8	585.4	699.1	926.6	1097.2	1118.2
122.5°	288.2	306.7	325.3	329.9	412.2	522.0	576.8	679.3	884.2	1037.8	1058.6
125°	313.7	330.5	347.5	351.7	423.7	519.6	567.6	654.7	828.7	959.2	978.4
127.5°	334.4	351.4	368.4	372.7	435.1	518.3	559.8	634.6	784.0	896.1	912.2
130°	345.4	363.8	382.2	386.8	443.4	519.1	556.9	623.4	756.4	856.2	871.1
132.5°	356.9	375.2	393.7	398.2	450.3	519.6	554.4	613.9	733.0	822.3	835.6
135°	373.9	390.6	407.3	411.5	457.6	519.1	549.9	599.8	699.5	774.3	785.8
137.5°	391.3	407.8	424.4	428.5	468.7	522.3	549.2	591.4	675.7	738.9	748.3
140°	405.6	420.9	436.1	440.0	475.5	522.9	546.6	583.0	655.8	710.4	719.2
142.5°	416.7	430.7	444.9	448.4	481.1	524.7	546.6	578.6	642.6	690.6	698.2
145°	433.7	446.0	458.3	461.4	488.6	524.8	542.9	569.1	621.4	660.7	666.4
147.5°	450.6	462.6	474.6	477.6	499.3	528.4	542.9	563.5	604.6	635.5	640.2
150°	461.7	472.5	483.4	486.1	505.0	530.3	542.9	560.3	595.1	621.2	625.0
152.5°	473.2	481.4	489.6	491.6	508.7	531.5	542.9	557.8	587.4	609.7	612.7
155°	490.1	496.2	502.3	503.8	516.9	534.2	542.9	554.7	578.3	596.0	598.0
157.5°	502.6	508.5	514.4	516.0	524.9	536.9	542.9	552.0	570.4	584.2	585.5
160°	511.1	515.8	520.4	521.5	528.7	538.2	542.9	550.8	566.5	578.3	579.1
162.5°	519.6	523.1	526.5	527.4	532.6	539.5	542.9	549.5	562.9	572.8	573.5
165°	528.9	532.0	535.0	535.8	538.2	541.3	542.9	547.7	557.2	564.3	565.1
167.5°	537.4	538.8	540.3	540.7	542.6	545.2	546.6	549.7	556.0	560.6	561.0
170°	542.9	544.3	545.9	546.2	546.3	546.5	546.6	549.7	556.0	560.6	560.6
172.5°	545.9	546.2	546.5	546.6	546.6	546.6	546.6	549.1	554.0	557.7	557.4
175°	549.9	549.9	549.9	549.9	548.8	547.3	546.6	548.1	551.2	553.6	553.6
177.5°	549.9	549.9	549.9	549.9	549.0	547.8	547.3	548.6	551.0	552.9	552.5
180°	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9	549.9



TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	556.9	556.9
2.5°	594.5	590.9
5°	764.6	768.2
7.5°	1029.7	1027.9
10°	1280.4	1296.5
12.5°	1463.0	1466.6
15°	1574.0	1581.2
17.5°	1617.0	1618.8
20°	1618.8	1615.2
22.5°	1599.1	1595.5
25°	1575.8	1574.0
27.5°	1554.4	1556.1
30°	1545.4	1550.8
32.5°	1545.4	1554.4
35°	1549.0	1557.9
37.5°	1547.2	1557.9
40°	1540.0	1552.6
42.5°	1520.3	1529.3
45°	1489.9	1500.6
47.5°	1450.5	1457.7
50°	1400.4	1407.5
52.5°	1337.7	1339.5
55°	1262.5	1269.6
57.5°	1181.9	1183.7
60°	1092.4	1097.7
62.5°	997.4	997.4
65°	897.1	900.7
67.5°	793.2	802.2
70°	687.6	689.4
72.5°	583.7	583.7
75°	476.3	478.1
77.5°	374.2	374.2
80°	277.5	279.3
82.5°	191.6	195.2
85°	120.0	120.0
87.5°	55.5	50.1
90°	14.1	14.1
92.5°	56.1	45.0
95°	195.8	162.1
97.5°	469.1	404.9
100°	676.0	599.3
102.5°	879.4	813.7
105°	1138.7	1103.5
107.5°	1308.7	1317.2
110°	1373.4	1410.2



TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1379.2	1435.6
115°	1342.6	1420.9
117.5°	1265.2	1351.9
120°	1202.6	1286.9
122.5°	1141.8	1225.0
125°	1054.9	1131.6
127.5°	976.9	1041.5
130°	930.9	990.6
132.5°	889.1	942.6
135°	831.9	878.0
137.5°	786.1	823.8
140°	754.5	789.8
142.5°	728.4	758.8
145°	689.4	712.3
147.5°	659.3	678.4
150°	640.4	655.8
152.5°	624.3	635.9
155°	605.7	613.4
157.5°	591.0	596.4
160°	582.2	585.4
162.5°	576.5	579.4
165°	568.2	571.3
167.5°	562.3	563.6
170°	560.6	560.6
172.5°	556.3	555.1
175°	553.6	553.6
177.5°	551.2	549.9
180°	549.9	549.9



TEST NUMBER: P936766

CATALOG NUMBER: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-3500K

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	4.73	5.67	5.63	6.61	7.80	17.90	18.85	18.81	19.78	20.98
	3H	5.44	6.29	6.36	7.23	8.45	19.75	20.60	20.67	21.54	22.77
	4H	5.74	6.55	6.67	7.49	8.73	20.40	21.21	21.33	22.15	23.38
	6H	5.99	6.74	6.94	7.69	8.94	20.83	21.58	21.78	22.53	23.78
	8H	6.06	6.78	7.02	7.75	8.99	20.96	21.67	21.91	22.64	23.88
	12H	6.09	6.76	7.04	7.73	9.00	21.03	21.71	21.99	22.67	23.94
4H	2H	11.95	12.76	12.89	13.70	14.94	18.19	19.00	19.13	19.94	21.17
	3H	13.53	14.20	14.48	15.18	16.43	20.24	20.92	21.19	21.89	23.14
	4H	13.62	14.24	14.58	15.21	16.48	21.01	21.63	21.97	22.60	23.87
	6H	13.64	14.18	14.61	15.17	16.44	21.56	22.09	22.53	23.09	24.36
	8H	13.62	14.12	14.59	15.11	16.39	21.72	22.22	22.70	23.21	24.49
	12H	13.58	14.03	14.57	15.04	16.33	21.82	22.27	22.81	23.28	24.57
8H	4H	15.08	15.58	16.05	16.57	17.85	21.08	21.58	22.05	22.57	23.85
	6H	15.32	15.74	16.32	16.77	18.05	21.71	22.13	22.71	23.16	24.44
	8H	15.34	15.71	16.35	16.73	18.03	21.93	22.30	22.94	23.32	24.62
	12H	15.31	15.64	16.33	16.65	17.99	22.08	22.41	23.10	23.42	24.76
12H	4H	15.22	15.68	16.22	16.68	17.97	21.04	21.49	22.03	22.49	23.78
	6H	15.58	15.95	16.59	16.97	18.27	21.70	22.07	22.71	23.08	24.38
	8H	15.66	15.98	16.67	16.99	18.34	21.93	22.26	22.95	23.27	24.61