

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: P936253

Luminaire Tested: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936253
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

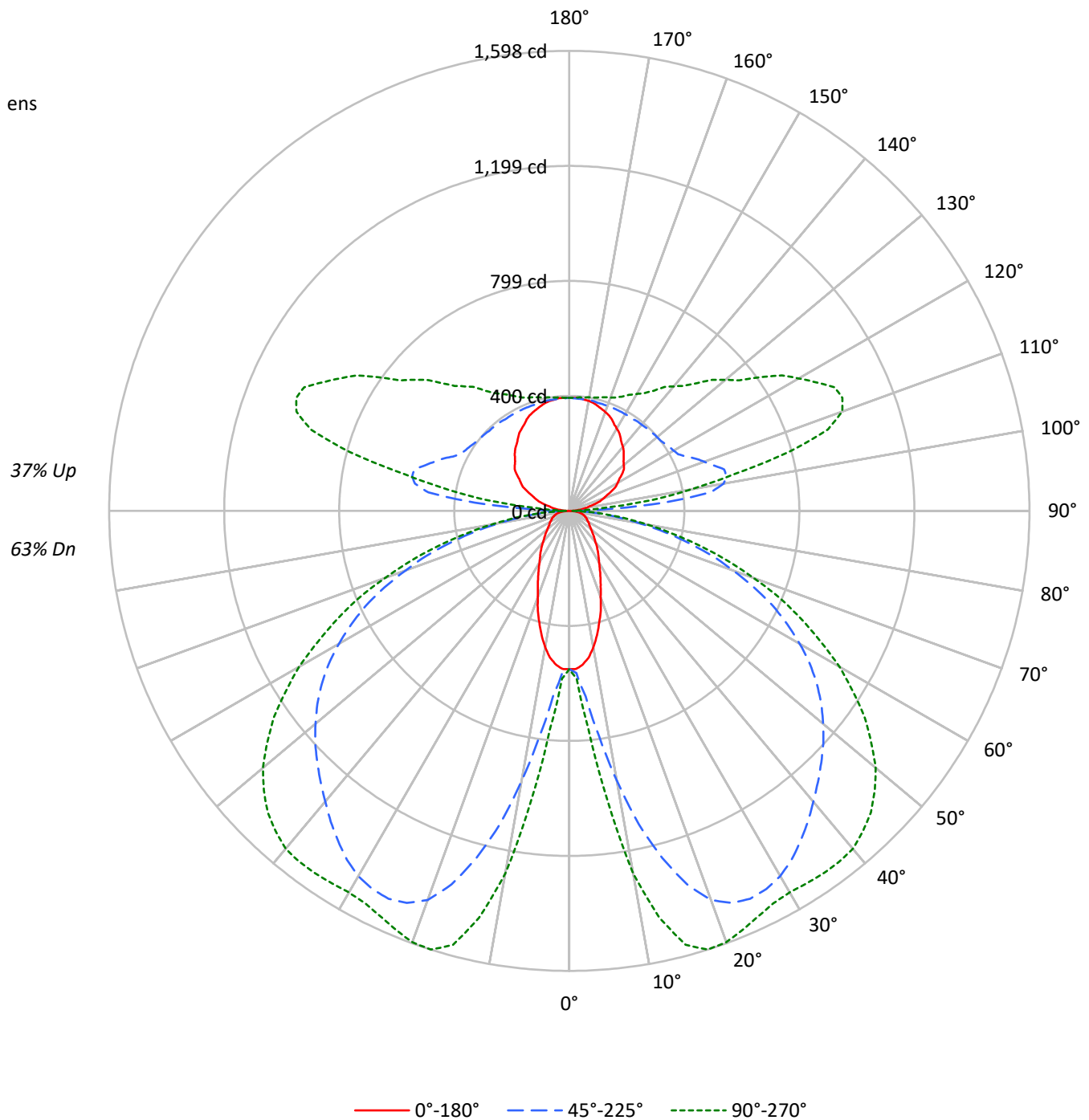
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6802.4 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 66
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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Luminous Intensity Polar Plot





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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1700	1700	1700
5°	1661	1965	2285
10°	1508	2865	3788
15°	1282	3745	4574
20°	1044	4341	4662
25°	871	4543	4567
30°	735	4573	4558
35°	650	4499	4677
40°	567	4401	4798
45°	514	4330	4817
50°	472	4266	4737
55°	452	4173	4527
60°	463	3991	4196
65°	483	3715	3740
70°	515	3242	3160
75°	573	2645	2465
80°	633	1837	1662
85°	574	976	850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	1.0
10°-20°	315.1	4.6
20°-30°	551.2	8.1
30°-40°	709.5	10.4
40°-50°	792.5	11.7
50°-60°	759.0	11.2
60°-70°	601.5	8.8
70°-80°	353.7	5.2
80°-90°	99.8	1.5
90°-100°	191.7	2.8
100°-110°	503.9	7.4
110°-120°	522.5	7.7
120°-130°	419.1	6.2
130°-140°	328.9	4.8
140°-150°	252.4	3.7
150°-160°	181.8	2.7
160°-170°	111.2	1.6
170°-180°	37.6	0.6
0°-30°	937.4	13.8
0°-40°	1646.9	24.2
0°-60°	3198.4	47.0
0°-90°	4253.4	62.5
90°-120°	1218.1	17.9
90°-150°	2218.5	32.6
90°-180°	2549.0	37.5
0°-180°	6802.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	536	574	647	732	758	49
15°	401	740	1248	1513	1560	112
25°	256	840	1486	1552	1554	118
35°	173	802	1400	1479	1538	108
45°	118	640	1237	1417	1481	92
55°	85	406	1050	1219	1253	77
65°	67	216	779	876	889	67
75°	49	132	428	470	472	52
85°	18	41	106	117	118	19
90°	3	7	20	10	10	3
95°	25	99	330	170	116	28
105°	91	138	557	846	789	96
115°	161	196	446	890	1016	159
125°	224	252	406	686	809	199
135°	267	294	393	554	628	207
145°	310	330	388	472	509	194
155°	350	360	388	426	439	161
165°	378	383	388	404	408	107
175°	393	393	391	396	396	37
180°	393	393	393	393	393	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6	549.6
2.5°	549.6	549.6	553.2	554.9	558.4	560.2	563.8	567.3	577.9	579.7	583.2
5°	535.5	542.5	565.5	574.3	599.1	632.6	646.8	669.8	717.5	731.6	740.5
7.5°	514.2	530.1	586.7	600.8	662.8	751.1	788.2	837.7	913.7	950.8	980.8
10°	480.7	514.2	615.0	648.6	749.3	883.7	952.5	1021.5	1136.3	1187.6	1207.0
12.5°	443.5	498.3	645.0	691.0	835.9	1032.1	1115.2	1191.2	1321.9	1390.9	1401.4
15°	401.2	475.4	673.3	740.5	927.8	1155.8	1247.7	1341.3	1463.3	1512.8	1525.2
17.5°	364.1	457.7	699.8	770.5	998.5	1267.1	1360.8	1438.6	1537.6	1571.1	1580.0
20°	318.1	429.5	717.5	809.4	1072.8	1348.5	1438.6	1498.6	1565.8	1587.0	1590.5
22.5°	284.6	399.4	728.1	823.6	1122.2	1397.9	1473.9	1521.7	1567.6	1574.6	1576.4
25°	256.3	365.8	726.4	839.5	1164.6	1427.9	1486.3	1521.7	1548.1	1551.7	1551.7
27.5°	229.8	328.7	719.2	843.0	1196.4	1435.1	1481.0	1505.7	1518.1	1525.2	1525.2
30°	206.8	293.4	701.6	835.9	1210.6	1427.9	1465.1	1477.5	1489.8	1500.4	1505.7
32.5°	189.1	259.8	675.1	821.7	1212.3	1410.3	1436.8	1443.8	1461.5	1486.3	1495.1
35°	173.2	226.3	645.0	802.3	1201.8	1382.0	1399.7	1406.8	1442.1	1479.2	1491.5
37.5°	157.3	201.5	606.2	768.8	1185.8	1348.5	1360.8	1373.1	1427.9	1472.1	1486.3
40°	141.4	180.2	560.2	731.6	1161.1	1307.8	1318.4	1337.8	1410.3	1461.5	1475.6
42.5°	129.0	162.6	510.7	692.8	1129.3	1261.9	1277.8	1306.0	1389.0	1443.8	1459.7
45°	118.4	144.9	457.7	639.8	1088.7	1214.1	1237.1	1276.0	1364.4	1417.3	1431.5
47.5°	107.8	132.5	403.0	584.9	1044.5	1166.4	1196.4	1240.6	1330.7	1382.0	1394.4
50°	99.0	120.2	348.2	526.6	996.7	1115.2	1150.5	1196.4	1288.4	1336.1	1352.0
52.5°	91.9	109.6	296.9	468.3	942.0	1062.1	1102.8	1150.5	1237.1	1283.0	1293.6
55°	84.8	100.7	252.7	406.5	885.4	1005.6	1049.7	1095.7	1180.5	1219.4	1226.5
57.5°	81.3	93.6	215.6	348.2	825.3	942.0	991.4	1033.8	1113.3	1143.5	1150.5
60°	76.0	88.4	187.3	298.7	759.9	881.9	924.3	966.7	1033.8	1058.6	1063.9
62.5°	70.7	84.8	166.1	250.9	692.8	811.2	853.6	892.4	949.0	966.7	973.8
65°	67.2	81.3	150.2	215.6	623.9	737.0	779.4	813.0	858.9	876.5	880.1
67.5°	63.6	77.7	137.8	185.6	554.9	662.8	694.6	726.4	761.7	779.4	781.2
70°	58.3	74.2	127.3	164.3	484.2	577.9	604.4	638.0	666.3	675.1	680.4
72.5°	54.8	68.9	120.2	148.4	411.7	496.6	521.4	540.8	565.5	574.3	574.3
75°	49.4	61.8	113.1	132.5	337.5	406.5	427.6	447.1	466.6	470.1	464.8
77.5°	44.2	54.8	97.2	111.4	263.3	321.6	339.3	349.9	365.8	369.3	371.1
80°	37.2	47.7	76.0	86.6	190.9	236.8	249.2	258.0	272.2	272.2	275.7
82.5°	28.3	37.2	54.8	61.8	129.0	162.6	173.2	178.5	187.3	187.3	187.3
85°	17.7	23.0	35.3	40.7	77.7	99.0	106.0	107.8	114.9	116.6	116.6
87.5°	8.9	12.4	23.0	24.8	40.7	51.3	51.3	54.8	54.8	53.0	51.3
90°	2.6	4.7	6.9	7.4	11.6	17.2	20.0	17.8	13.4	10.0	10.0
92.5°	10.5	28.5	46.5	50.9	71.6	99.2	112.9	99.0	71.1	50.2	48.1
95°	25.3	58.1	91.0	99.2	176.2	278.9	330.2	294.6	223.5	170.2	164.2
97.5°	43.8	72.8	101.8	109.0	237.3	408.5	494.0	471.6	426.7	393.0	381.4
100°	58.1	84.3	110.6	117.2	259.6	449.5	544.5	546.1	549.4	551.8	538.1
102.5°	70.2	94.7	119.2	125.3	269.8	462.4	558.7	587.3	644.5	687.4	675.7
105°	90.8	111.5	132.3	137.5	277.4	463.8	557.1	621.2	749.5	845.8	839.5
107.5°	111.9	131.2	150.6	155.5	278.8	443.2	525.4	614.9	793.9	928.2	929.7
110°	126.1	143.6	161.1	165.5	276.7	424.9	499.1	599.1	799.2	949.3	955.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	140.2	156.8	173.5	177.6	276.8	408.9	475.1	577.5	782.2	935.8	945.9
115°	161.3	176.6	192.0	195.9	279.3	390.6	446.3	544.9	742.2	890.2	904.1
117.5°	182.1	196.0	210.0	213.5	284.5	379.2	426.5	515.6	693.6	827.1	842.6
120°	194.2	207.4	220.5	223.8	288.7	375.2	418.5	499.8	662.6	784.6	799.7
122.5°	206.1	219.4	232.6	235.9	294.8	373.2	412.5	485.7	632.2	742.1	756.9
125°	224.3	236.4	248.6	251.5	303.0	371.6	405.9	468.0	592.5	685.9	699.6
127.5°	239.1	251.3	263.5	266.6	311.2	370.6	400.3	453.7	560.6	640.7	652.3
130°	247.0	260.2	273.3	276.6	317.2	371.2	398.2	445.8	540.9	612.3	623.0
132.5°	255.2	268.3	281.5	284.7	322.0	371.6	396.4	439.0	524.2	588.0	597.6
135°	267.4	279.3	291.2	294.2	327.3	371.3	393.2	428.9	500.2	553.7	561.9
137.5°	279.7	291.6	303.4	306.4	335.2	373.5	392.7	422.8	483.1	528.3	535.1
140°	290.0	300.9	311.9	314.6	340.0	373.9	390.8	416.8	468.9	508.0	514.3
142.5°	297.9	308.0	318.1	320.7	344.0	375.2	390.8	413.7	459.4	493.8	499.2
145°	310.1	318.9	327.7	329.9	349.3	375.2	388.2	406.9	444.3	472.4	476.5
147.5°	322.2	330.8	339.4	341.5	357.0	377.8	388.2	403.0	432.4	454.4	457.9
150°	330.2	337.9	345.6	347.5	361.1	379.2	388.2	400.7	425.5	444.2	446.9
152.5°	338.3	344.2	350.0	351.5	363.7	380.0	388.2	398.8	420.1	436.0	438.1
155°	350.4	354.7	359.1	360.2	369.5	382.0	388.2	396.6	413.6	426.2	427.6
157.5°	359.4	363.6	367.9	369.0	375.4	383.9	388.2	394.8	407.9	417.7	418.7
160°	365.5	368.8	372.1	372.9	378.0	384.8	388.2	393.8	405.1	413.5	414.0
162.5°	371.6	374.1	376.5	377.1	380.8	385.7	388.2	393.0	402.4	409.6	410.1
165°	378.2	380.4	382.7	383.2	384.9	387.1	388.2	391.6	398.4	403.5	404.0
167.5°	384.3	385.3	386.4	386.6	388.0	389.9	390.8	393.0	397.5	400.9	401.1
170°	388.2	389.3	390.3	390.6	390.7	390.8	390.8	393.0	397.5	400.9	400.9
172.5°	390.3	390.6	390.8	390.8	390.8	390.8	390.8	392.6	396.1	398.7	398.6
175°	393.2	393.2	393.2	393.2	392.4	391.4	390.8	392.0	394.2	395.9	395.9
177.5°	393.2	393.2	393.2	393.2	392.6	391.8	391.4	392.2	394.0	395.3	395.1
180°	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	549.6	549.6
2.5°	586.7	583.2
5°	754.6	758.1
7.5°	1016.2	1014.4
10°	1263.6	1279.5
12.5°	1443.8	1447.4
15°	1553.5	1560.5
17.5°	1595.9	1597.6
20°	1597.6	1594.1
22.5°	1578.1	1574.6
25°	1555.2	1553.5
27.5°	1534.0	1535.8
30°	1525.2	1530.4
32.5°	1525.2	1534.0
35°	1528.7	1537.6
37.5°	1526.9	1537.6
40°	1519.8	1532.2
42.5°	1500.4	1509.3
45°	1470.4	1481.0
47.5°	1431.5	1438.6
50°	1382.0	1389.0
52.5°	1320.2	1321.9
55°	1246.0	1253.0
57.5°	1166.4	1168.1
60°	1078.0	1083.3
62.5°	984.4	984.4
65°	885.4	888.9
67.5°	782.9	791.7
70°	678.7	680.4
72.5°	576.2	576.2
75°	470.1	471.8
77.5°	369.3	369.3
80°	273.9	275.7
82.5°	189.1	192.6
85°	118.4	118.4
87.5°	54.8	49.4
90°	10.0	10.0
92.5°	40.2	32.2
95°	140.0	115.8
97.5°	335.5	289.5
100°	483.4	428.6
102.5°	628.8	581.9
105°	814.3	789.1
107.5°	935.8	941.9
110°	982.1	1008.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	986.2	1026.6
115°	960.1	1016.0
117.5°	904.7	966.7
120°	859.9	920.2
122.5°	816.5	875.9
125°	754.3	809.1
127.5°	698.5	744.7
130°	665.7	708.3
132.5°	635.8	674.0
135°	594.9	627.8
137.5°	562.0	589.1
140°	539.5	564.7
142.5°	520.9	542.6
145°	492.9	509.3
147.5°	471.5	485.1
150°	457.9	468.9
152.5°	446.4	454.7
155°	433.1	438.6
157.5°	422.6	426.5
160°	416.3	418.5
162.5°	412.2	414.3
165°	406.3	408.5
167.5°	402.0	403.0
170°	400.9	400.9
172.5°	397.7	396.9
175°	395.9	395.9
177.5°	394.2	393.2
180°	393.2	393.2



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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	3.92	4.96	4.75	5.82	6.89	17.11	18.15	17.94	19.01	20.09
	3H	4.64	5.57	5.48	6.44	7.55	18.97	19.90	19.81	20.77	21.88
	4H	4.94	5.83	5.80	6.70	7.82	19.63	20.51	20.49	21.39	22.50
	6H	5.20	6.02	6.08	6.90	8.03	20.07	20.89	20.94	21.77	22.90
	8H	5.28	6.06	6.16	6.96	8.09	20.20	20.98	21.08	21.88	23.01
	12H	5.30	6.04	6.19	6.94	8.09	20.28	21.02	21.16	21.92	23.07
4H	2H	11.16	12.05	12.03	12.93	14.04	17.41	18.29	18.27	19.17	20.28
	3H	12.75	13.49	13.62	14.40	15.53	19.47	20.21	20.35	21.12	22.25
	4H	12.85	13.53	13.74	14.43	15.59	20.25	20.93	21.14	21.83	22.99
	6H	12.87	13.46	13.78	14.39	15.54	20.81	21.39	21.71	22.32	23.48
	8H	12.85	13.40	13.76	14.33	15.50	20.97	21.52	21.88	22.45	23.62
	12H	12.82	13.31	13.75	14.26	15.43	21.08	21.58	22.01	22.52	23.70
8H	4H	14.31	14.86	15.22	15.79	16.96	20.33	20.88	21.23	21.80	22.97
	6H	14.56	15.02	15.50	15.98	17.16	20.97	21.42	21.90	22.39	23.56
	8H	14.58	14.99	15.53	15.94	17.13	21.19	21.60	22.14	22.55	23.74
	12H	14.56	14.92	15.51	15.87	17.10	21.35	21.71	22.30	22.66	23.89
12H	4H	14.47	14.96	15.39	15.90	17.08	20.29	20.78	21.22	21.73	22.90
	6H	14.83	15.23	15.77	16.19	17.37	20.95	21.36	21.90	22.32	23.50
	8H	14.90	15.26	15.85	16.21	17.45	21.20	21.55	22.15	22.50	23.74