

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: P937589

Luminaire Tested: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937589
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

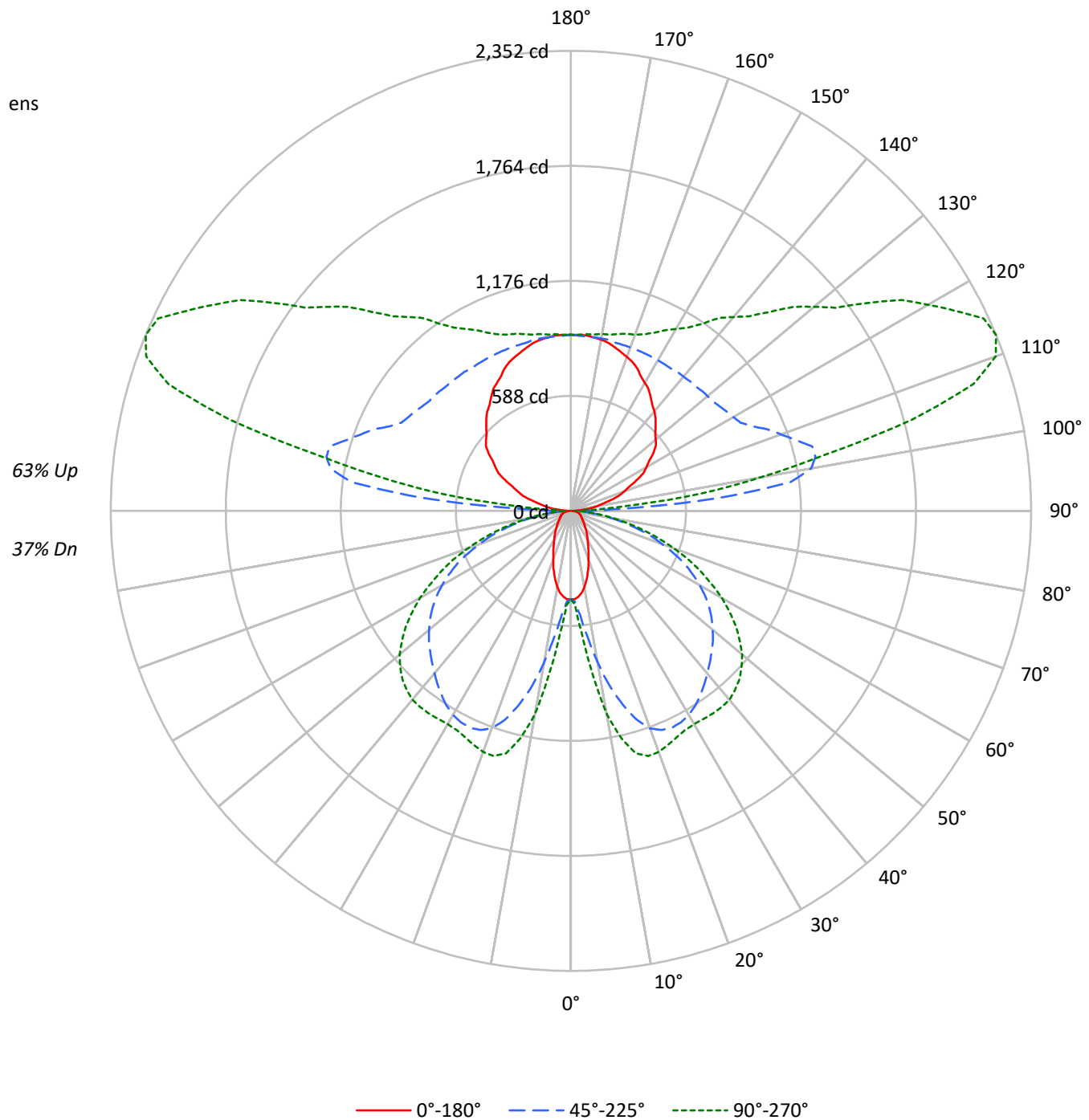
Lumens per Lamp: N/A
Luminaire Lumens: 9340.1 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 73.8
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: P937589

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-6-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P937589

CATALOG NUMBER: SQ4-FB-100U-075D-B2750-1D-UNV-W2A-W-6-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2731	3231	3759
10°	2476	4709	6231
15°	2103	6151	7525
20°	1712	7126	7669
25°	1428	7456	7513
30°	1203	7501	7499
35°	1063	7375	7693
40°	926	7210	7894
45°	838	7089	7924
50°	768	6980	7793
55°	735	6822	7447
60°	752	6519	6902
65°	780	6061	6152
70°	830	5282	5197
75°	916	4302	4056
80°	993	2980	2732
85°	864	1578	1399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	0.6
10°-20°	259.2	2.8
20°-30°	453.3	4.9
30°-40°	583.6	6.2
40°-50°	651.8	7.0
50°-60°	624.3	6.7
60°-70°	494.7	5.3
70°-80°	290.9	3.1
80°-90°	84.3	0.9
90°-100°	439.1	4.7
100°-110°	1154.4	12.4
110°-120°	1197.0	12.8
120°-130°	960.2	10.3
130°-140°	753.4	8.1
140°-150°	578.2	6.2
150°-160°	416.4	4.5
160°-170°	254.8	2.7
170°-180°	86.1	0.9
0°-30°	771.0	8.3
0°-40°	1354.5	14.5
0°-60°	2630.6	28.2
0°-90°	3500.5	37.5
90°-120°	2790.5	29.9
90°-150°	5082.3	54.4
90°-180°	5840.0	62.5
0°-180°	9340.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	452	452	452	452	452	
5°	440	472	532	602	624	41
15°	330	609	1026	1244	1284	92
25°	211	690	1222	1276	1278	97
35°	142	660	1151	1217	1265	89
45°	97	526	1017	1166	1218	75
55°	70	334	863	1003	1030	64
65°	55	177	641	721	731	55
75°	41	109	352	387	388	43
85°	14	33	87	96	97	15
90°	6	17	46	23	23	6
95°	58	227	756	390	265	64
105°	208	315	1276	1938	1808	220
115°	369	449	1022	2039	2328	365
125°	514	576	930	1571	1854	456
135°	612	674	901	1268	1438	474
145°	710	756	889	1082	1167	445
155°	803	825	889	976	1005	369
165°	866	878	889	924	936	244
175°	901	901	895	907	907	86
180°	901	901	901	901	901	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0
2.5°	452.0	452.0	454.9	456.4	459.3	460.8	463.7	466.6	475.3	476.7	479.7
5°	440.4	446.2	465.1	472.4	492.7	520.4	532.0	550.9	590.1	601.7	609.0
7.5°	423.0	436.0	482.6	494.2	545.1	617.7	648.3	689.0	751.5	782.0	806.7
10°	395.4	423.0	505.8	533.4	616.3	726.8	783.4	840.1	934.6	976.8	992.7
12.5°	364.8	409.9	530.5	568.3	687.5	848.8	917.2	979.7	1087.2	1144.0	1152.7
15°	329.9	391.0	553.8	609.0	763.1	950.6	1026.2	1103.3	1203.6	1244.3	1254.5
17.5°	299.4	376.5	575.6	633.7	821.2	1042.2	1119.3	1183.2	1264.6	1292.3	1299.5
20°	261.6	353.2	590.1	665.7	882.3	1109.1	1183.2	1232.7	1287.9	1305.3	1308.2
22.5°	234.0	328.5	598.8	677.3	923.0	1149.8	1212.3	1251.6	1289.4	1295.2	1296.6
25°	210.8	300.9	597.4	690.4	957.9	1174.5	1222.5	1251.6	1273.4	1276.3	1276.3
27.5°	189.0	270.4	591.6	693.3	984.0	1180.3	1218.1	1238.5	1248.7	1254.5	1254.5
30°	170.1	241.3	577.0	687.5	995.6	1174.5	1205.0	1215.2	1225.4	1234.1	1238.5
32.5°	155.5	213.7	555.2	675.9	997.1	1160.0	1181.8	1187.6	1202.1	1222.5	1229.8
35°	142.4	186.0	530.5	659.9	988.4	1136.7	1151.3	1157.1	1186.2	1216.7	1226.9
37.5°	129.4	165.7	498.6	632.3	975.3	1109.1	1119.3	1129.5	1174.5	1210.9	1222.5
40°	116.3	148.3	460.8	601.7	954.9	1075.6	1084.3	1100.3	1160.0	1202.1	1213.8
42.5°	106.1	133.7	420.1	569.8	928.8	1037.8	1050.9	1074.1	1142.5	1187.6	1200.7
45°	97.4	119.2	376.5	526.2	895.4	998.6	1017.4	1049.4	1122.2	1165.8	1177.4
47.5°	88.7	109.0	331.4	481.1	859.0	959.3	984.0	1020.4	1094.5	1136.7	1146.9
50°	81.4	98.8	286.3	433.1	819.8	917.2	946.2	984.0	1059.6	1098.8	1112.0
52.5°	75.6	90.1	244.2	385.2	774.7	873.6	907.0	946.2	1017.4	1055.2	1064.0
55°	69.8	82.8	207.9	334.3	728.2	827.0	863.4	901.2	970.9	1002.9	1008.7
57.5°	66.9	77.0	177.3	286.3	678.8	774.7	815.4	850.3	915.7	940.4	946.2
60°	62.5	72.7	154.1	245.6	625.0	725.3	760.2	795.1	850.3	870.6	875.0
62.5°	58.1	69.8	136.6	206.4	569.8	667.2	702.0	734.0	780.5	795.1	800.9
65°	55.2	66.9	123.5	177.3	513.1	606.1	641.0	668.6	706.4	720.9	723.8
67.5°	52.3	64.0	113.4	152.6	456.4	545.1	571.2	597.4	626.5	641.0	642.4
70°	48.0	61.0	104.7	135.2	398.3	475.3	497.1	524.7	548.0	555.2	559.6
72.5°	45.1	56.7	98.8	122.1	338.7	408.4	428.8	444.8	465.1	472.4	472.4
75°	40.7	50.9	93.0	109.0	277.6	334.3	351.7	367.7	383.7	386.6	382.3
77.5°	36.3	45.1	79.9	91.6	216.6	264.5	279.1	287.8	300.9	303.8	305.2
80°	30.5	39.2	62.5	71.2	157.0	194.8	204.9	212.2	223.8	223.8	226.7
82.5°	23.3	30.5	45.1	50.9	106.1	133.7	142.4	146.8	154.1	154.1	154.1
85°	14.5	18.9	29.1	33.4	64.0	81.4	87.2	88.7	94.5	95.9	95.9
87.5°	7.3	10.2	18.9	20.3	33.4	42.2	42.2	45.1	45.1	43.6	42.2
90°	6.0	10.9	15.7	17.0	26.6	39.5	45.9	40.8	30.6	23.0	23.0
92.5°	24.2	65.3	106.4	116.7	164.1	227.1	258.7	226.7	162.8	114.8	110.3
95°	58.0	133.2	208.5	227.3	403.7	638.8	756.3	674.9	512.0	389.9	376.1
97.5°	100.4	166.8	233.1	249.7	543.7	935.8	1131.8	1080.3	977.4	900.2	873.8
100°	133.0	193.2	253.4	268.4	594.7	1029.7	1247.2	1251.0	1258.5	1264.2	1232.8
102.5°	160.9	217.1	273.2	287.2	618.1	1059.3	1279.9	1345.5	1476.6	1574.9	1548.1
105°	207.9	255.5	303.1	315.0	635.5	1062.7	1276.3	1423.3	1717.2	1937.6	1923.2
107.5°	256.3	300.7	345.1	356.1	638.7	1015.3	1203.7	1408.7	1818.7	2126.3	2129.8
110°	289.0	329.0	369.1	379.1	633.8	973.5	1143.2	1372.4	1830.8	2174.6	2189.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	321.0	359.2	397.4	406.9	634.0	936.8	1088.2	1322.8	1792.0	2143.8	2166.9
115°	369.4	404.6	439.7	448.6	639.8	894.8	1022.3	1248.3	1700.3	2039.3	2071.3
117.5°	417.2	449.1	481.1	489.1	651.7	868.5	976.9	1180.9	1588.8	1894.7	1930.2
120°	445.0	475.1	505.1	512.7	661.4	859.7	958.8	1145.2	1517.8	1797.4	1831.9
122.5°	472.2	502.5	532.9	540.5	675.3	855.0	945.0	1112.8	1448.4	1700.0	1734.1
125°	513.9	541.6	569.3	576.2	694.1	851.3	929.9	1072.4	1357.5	1571.3	1602.7
127.5°	547.8	575.7	603.7	610.7	712.8	849.0	917.2	1039.5	1284.3	1467.9	1494.4
130°	565.9	596.0	626.1	633.6	726.6	850.4	912.3	1021.2	1239.2	1402.6	1427.0
132.5°	584.6	614.7	644.8	652.3	737.6	851.3	908.0	1005.6	1200.7	1347.0	1368.9
135°	612.4	639.8	667.3	674.1	749.7	850.4	900.8	982.5	1145.8	1268.4	1287.3
137.5°	640.8	667.9	695.2	701.9	767.8	855.7	899.6	968.7	1106.8	1210.4	1225.8
140°	664.4	689.4	714.4	720.6	778.9	856.5	895.4	955.0	1074.3	1163.8	1178.2
142.5°	682.6	705.7	728.8	734.6	788.2	859.6	895.4	947.8	1052.5	1131.1	1143.5
145°	710.4	730.5	750.7	755.7	800.3	859.7	889.3	932.2	1017.9	1082.2	1091.6
147.5°	738.2	757.8	777.3	782.3	817.9	865.5	889.3	923.1	990.5	1041.1	1048.8
150°	756.3	774.0	791.8	796.2	827.2	868.6	889.3	917.8	974.7	1017.4	1023.7
152.5°	775.1	788.6	801.9	805.3	833.3	870.6	889.3	913.7	962.3	998.7	1003.5
155°	802.9	812.8	822.7	825.2	846.6	875.1	889.3	908.7	947.4	976.4	979.6
157.5°	823.5	833.1	842.7	845.2	859.9	879.6	889.3	904.4	934.5	957.1	959.3
160°	837.3	844.9	852.4	854.3	866.0	881.6	889.3	902.2	928.0	947.4	948.7
162.5°	851.3	856.9	862.5	864.0	872.4	883.7	889.3	900.2	922.0	938.3	939.4
165°	866.4	871.4	876.6	877.8	881.7	886.8	889.3	897.1	912.7	924.4	925.7
167.5°	880.2	882.7	885.1	885.7	888.9	893.2	895.4	900.5	910.7	918.3	918.9
170°	889.3	891.8	894.2	894.8	895.0	895.3	895.4	900.5	910.7	918.3	918.3
172.5°	894.2	894.7	895.3	895.4	895.4	895.4	895.4	899.4	907.5	913.5	913.0
175°	900.8	900.8	900.8	900.8	898.9	896.5	895.4	897.9	903.0	906.9	906.9
177.5°	900.8	900.8	900.8	900.8	899.4	897.6	896.6	898.7	902.6	905.6	905.0
180°	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	452.0	452.0
2.5°	482.6	479.7
5°	620.6	623.6
7.5°	835.8	834.3
10°	1039.3	1052.3
12.5°	1187.6	1190.5
15°	1277.7	1283.5
17.5°	1312.6	1314.1
20°	1314.1	1311.2
22.5°	1298.1	1295.2
25°	1279.2	1277.7
27.5°	1261.7	1263.2
30°	1254.5	1258.8
32.5°	1254.5	1261.7
35°	1257.4	1264.6
37.5°	1255.9	1264.6
40°	1250.1	1260.3
42.5°	1234.1	1241.4
45°	1209.4	1218.1
47.5°	1177.4	1183.2
50°	1136.7	1142.5
52.5°	1085.8	1087.2
55°	1024.7	1030.5
57.5°	959.3	960.8
60°	886.6	891.0
62.5°	809.6	809.6
65°	728.2	731.1
67.5°	643.9	651.2
70°	558.1	559.6
72.5°	473.8	473.8
75°	386.6	388.1
77.5°	303.8	303.8
80°	225.3	226.7
82.5°	155.5	158.4
85°	97.4	97.4
87.5°	45.1	40.7
90°	23.0	23.0
92.5°	92.0	73.7
95°	320.7	265.4
97.5°	768.5	663.2
100°	1107.3	981.8
102.5°	1440.5	1333.1
105°	1865.4	1807.7
107.5°	2143.8	2157.8
110°	2249.9	2310.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2259.3	2351.8
115°	2199.4	2327.6
117.5°	2072.4	2214.6
120°	1970.1	2108.2
122.5°	1870.4	2006.6
125°	1728.1	1853.6
127.5°	1600.3	1706.1
130°	1524.9	1622.7
132.5°	1456.5	1544.1
135°	1362.8	1438.3
137.5°	1287.6	1349.4
140°	1236.1	1293.8
142.5°	1193.3	1243.0
145°	1129.3	1166.9
147.5°	1080.0	1111.2
150°	1049.0	1074.3
152.5°	1022.6	1041.7
155°	992.2	1004.8
157.5°	968.1	976.9
160°	953.8	958.8
162.5°	944.3	949.1
165°	930.8	935.9
167.5°	921.0	923.2
170°	918.3	918.3
172.5°	911.2	909.3
175°	906.9	906.9
177.5°	902.9	900.8
180°	900.8	900.8

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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	3.30	4.09	4.36	5.15	6.59	16.47	17.26	17.52	18.32	19.75
	3H	4.01	4.71	5.07	5.78	7.23	18.30	19.00	19.36	20.07	21.53
	4H	4.30	4.97	5.37	6.04	7.50	18.94	19.61	20.01	20.68	22.14
	6H	4.55	5.16	5.63	6.24	7.71	19.36	19.98	20.44	21.05	22.52
	8H	4.61	5.20	5.70	6.29	7.76	19.48	20.06	20.56	21.15	22.62
	12H	4.63	5.19	5.72	6.27	7.76	19.54	20.10	20.63	21.18	22.67
4H	2H	10.50	11.17	11.58	12.24	13.70	16.74	17.41	17.81	18.48	19.94
	3H	12.06	12.62	13.15	13.72	15.20	18.77	19.33	19.86	20.43	21.90
	4H	12.16	12.67	13.25	13.76	15.25	19.53	20.04	20.62	21.13	22.63
	6H	12.16	12.61	13.26	13.72	15.20	20.06	20.50	21.16	21.61	23.10
	8H	12.14	12.55	13.24	13.65	15.16	20.22	20.63	21.32	21.73	23.24
	12H	12.09	12.46	13.21	13.58	15.09	20.30	20.68	21.42	21.79	23.31
8H	4H	13.59	14.00	14.69	15.11	16.61	19.58	20.00	20.68	21.10	22.61
	6H	13.83	14.17	14.95	15.32	16.82	20.20	20.55	21.33	21.69	23.19
	8H	13.85	14.15	14.98	15.27	16.79	20.42	20.72	21.55	21.85	23.37
	12H	13.81	14.08	14.95	15.20	16.76	20.56	20.82	21.69	21.95	23.50
12H	4H	13.73	14.10	14.85	15.22	16.73	19.53	19.91	20.65	21.02	22.53
	6H	14.09	14.39	15.22	15.51	17.03	20.19	20.49	21.32	21.61	23.14
	8H	14.15	14.42	15.29	15.54	17.10	20.41	20.67	21.54	21.80	23.36