

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: P937735

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937735
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-92765-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

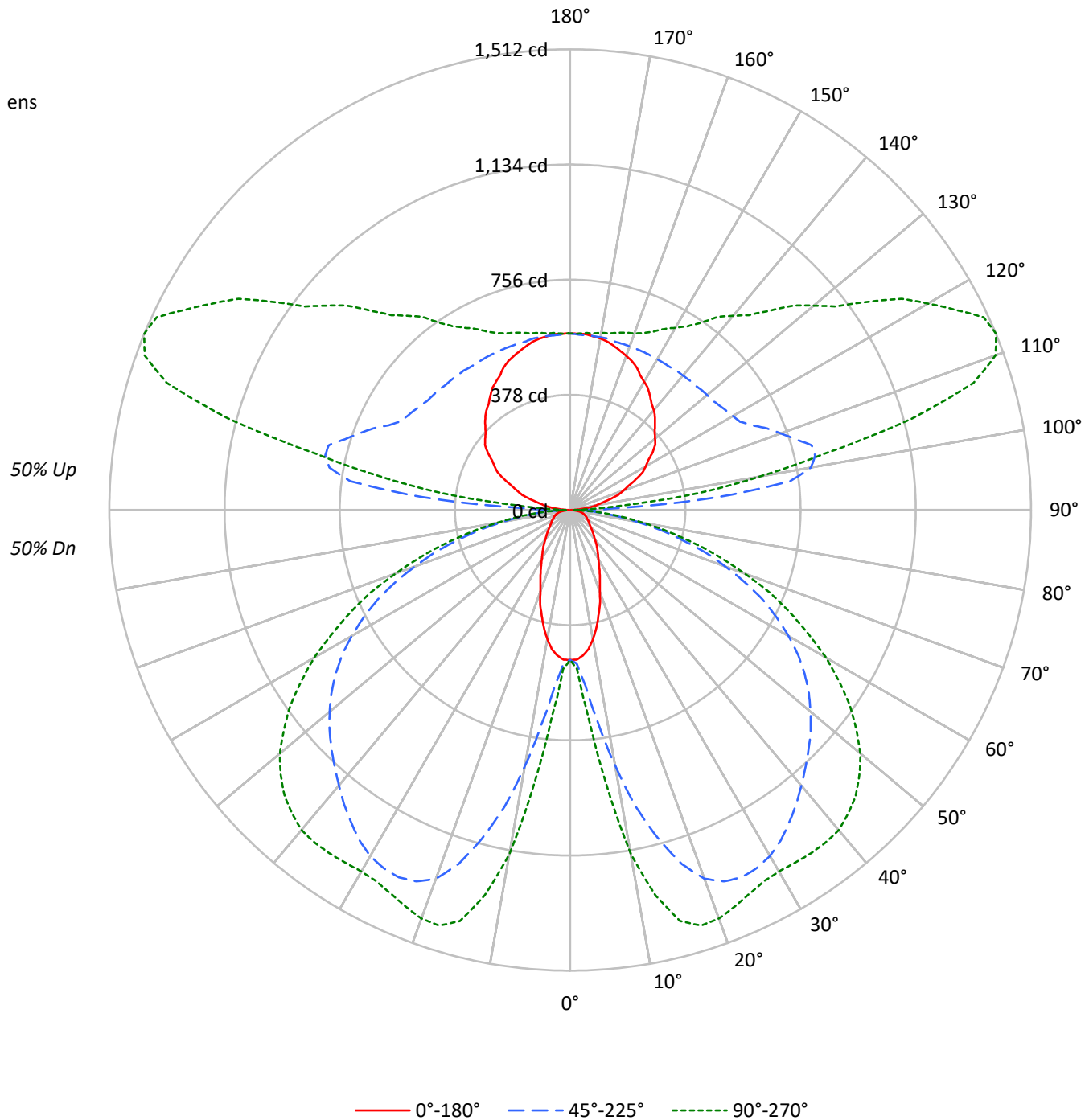
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7562.7 lumens
Efficiency: N/A
Efficacy: 109.9 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

TEST NUMBER: P937735
CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-5000K

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	50	30	10
RCR																				
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50		
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41		
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34		
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28		
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23		
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20		
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17		
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15		
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13		
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11		
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4564	4564	4564
5°	4454	5272	6135
10°	4036	7679	10171
15°	3426	10024	12281
20°	2786	11609	12516
25°	2322	12139	12263
30°	1955	12205	12239
35°	1726	11993	12556
40°	1502	11721	12882
45°	1357	11518	12933
50°	1242	11333	12720
55°	1186	11066	12156
60°	1210	10566	11266
65°	1252	9812	10041
70°	1325	8539	8484
75°	1453	6946	6620
80°	1554	4799	4462
85°	1308	2533	2284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12933 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	0.8
10°-20°	282.0	3.7
20°-30°	493.3	6.5
30°-40°	635.0	8.4
40°-50°	709.2	9.4
50°-60°	679.3	9.0
60°-70°	538.3	7.1
70°-80°	316.6	4.2
80°-90°	90.2	1.2
90°-100°	282.4	3.7
100°-110°	742.4	9.8
110°-120°	769.8	10.2
120°-130°	617.4	8.2
130°-140°	484.5	6.4
140°-150°	371.9	4.9
150°-160°	267.8	3.5
160°-170°	163.9	2.2
170°-180°	55.4	0.7
0°-30°	838.9	11.1
0°-40°	1473.9	19.5
0°-60°	2862.4	37.8
0°-90°	3807.4	50.3
90°-120°	1794.5	23.7
90°-150°	3268.3	43.2
90°-180°	3755.0	49.7
0°-180°	7562.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	479	514	579	655	678	44
15°	359	663	1117	1354	1396	100
25°	229	751	1330	1389	1390	106
35°	155	718	1253	1324	1376	97
45°	106	572	1107	1268	1325	82
55°	76	364	940	1091	1121	69
65°	60	193	698	784	796	60
75°	44	119	383	421	422	46
85°	16	36	95	104	106	17
90°	4	11	30	15	15	4
95°	37	146	486	251	171	41
105°	134	203	821	1246	1162	142
115°	238	288	658	1311	1497	235
125°	330	370	598	1010	1192	293
135°	394	434	579	816	925	305
145°	457	486	572	696	750	286
155°	516	531	572	628	646	237
165°	557	564	572	594	602	157
175°	579	579	576	583	583	55
180°	579	579	579	579	579	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	491.8	491.8	491.8	491.8	491.8	491.8	491.8	491.8	491.8	491.8	491.8
2.5°	491.8	491.8	495.0	496.6	499.8	501.4	504.6	507.7	517.2	518.8	521.9
5°	479.2	485.6	506.1	514.0	536.1	566.2	578.9	599.4	642.1	654.8	662.7
7.5°	460.2	474.5	525.1	537.7	593.1	672.1	705.4	749.7	817.7	850.9	877.8
10°	430.2	460.2	550.4	580.5	670.6	790.8	852.5	914.1	1017.0	1062.9	1080.2
12.5°	397.0	446.0	577.3	618.4	748.1	923.7	998.0	1066.0	1183.1	1244.7	1254.2
15°	359.0	425.5	602.6	662.7	830.3	1034.3	1116.6	1200.4	1309.6	1353.8	1365.0
17.5°	325.8	409.7	626.3	689.6	893.6	1134.0	1217.8	1287.5	1376.0	1406.1	1413.9
20°	284.7	384.4	642.1	724.4	960.0	1206.8	1287.5	1341.2	1401.3	1420.3	1423.5
22.5°	254.6	357.4	651.6	737.0	1004.3	1251.0	1319.1	1361.8	1402.9	1409.3	1410.8
25°	229.4	327.4	650.1	751.2	1042.3	1277.9	1330.2	1361.8	1385.5	1388.7	1388.7
27.5°	205.6	294.2	643.7	754.4	1070.7	1284.3	1325.4	1347.6	1358.6	1365.0	1365.0
30°	185.1	262.6	627.9	748.1	1083.4	1277.9	1311.1	1322.2	1333.3	1342.8	1347.6
32.5°	169.3	232.5	604.2	735.4	1085.0	1262.1	1285.9	1292.1	1308.0	1330.2	1338.0
35°	155.0	202.5	577.3	718.0	1075.5	1236.8	1252.6	1259.0	1290.5	1323.8	1334.9
37.5°	140.8	180.3	542.5	688.0	1061.3	1206.8	1217.8	1229.0	1277.9	1317.5	1330.2
40°	126.6	161.3	501.4	654.8	1039.1	1170.3	1179.9	1197.3	1262.1	1308.0	1320.6
42.5°	115.4	145.5	457.1	620.0	1010.6	1129.3	1143.5	1168.8	1243.2	1292.1	1306.4
45°	106.0	129.7	409.7	572.5	974.2	1086.6	1107.2	1141.9	1221.0	1268.5	1281.1
47.5°	96.5	118.6	360.6	523.5	934.7	1043.9	1070.7	1110.3	1190.9	1236.8	1247.9
50°	88.6	107.6	311.5	471.3	892.0	998.0	1029.7	1070.7	1153.0	1195.7	1210.0
52.5°	82.3	98.1	265.7	419.1	843.0	950.5	987.0	1029.7	1107.2	1148.3	1157.7
55°	75.9	90.1	226.2	363.8	792.4	899.9	939.5	980.6	1056.5	1091.3	1097.6
57.5°	72.7	83.8	192.9	311.5	738.6	843.0	887.3	925.3	996.4	1023.3	1029.7
60°	68.0	79.1	167.7	267.3	680.1	789.3	827.2	865.2	925.3	947.4	952.1
62.5°	63.3	75.9	148.7	224.6	620.0	726.0	763.9	798.7	849.4	865.2	871.4
65°	60.1	72.7	134.4	192.9	558.3	659.5	697.5	727.6	768.7	784.5	787.7
67.5°	56.9	69.6	123.4	166.1	496.6	593.1	621.6	650.1	681.7	697.5	699.1
70°	52.2	66.5	113.8	147.1	433.3	517.2	540.9	570.9	596.2	604.2	609.0
72.5°	49.1	61.7	107.6	132.8	368.6	444.5	466.6	484.0	506.1	514.0	514.0
75°	44.3	55.3	101.2	118.6	302.1	363.8	382.8	400.1	417.5	420.7	415.9
77.5°	39.5	49.1	87.0	99.6	235.6	287.9	303.7	313.1	327.4	330.5	332.1
80°	33.2	42.7	68.0	77.5	170.8	211.9	223.0	230.9	243.6	243.6	246.8
82.5°	25.3	33.2	49.1	55.3	115.4	145.5	155.0	159.7	167.7	167.7	167.7
85°	15.8	20.6	31.6	36.4	69.6	88.6	94.9	96.5	102.8	104.4	104.4
87.5°	7.9	11.0	20.6	22.2	36.4	45.9	45.9	49.1	49.1	47.5	45.9
90°	3.9	7.0	10.1	10.8	17.1	25.4	29.5	26.3	19.7	14.8	14.8
92.5°	15.5	42.0	68.4	75.1	105.5	146.1	166.4	145.8	104.7	73.8	70.9
95°	37.3	85.7	134.1	146.2	259.6	410.7	486.3	434.0	329.3	250.8	241.9
97.5°	64.5	107.2	149.9	160.6	349.7	601.8	727.8	694.7	628.5	578.9	561.9
100°	85.5	124.2	162.9	172.6	382.5	662.2	802.1	804.5	809.3	812.9	792.7
102.5°	103.4	139.6	175.6	184.7	397.5	681.2	823.1	865.3	949.6	1012.8	995.5
105°	133.8	164.3	194.9	202.6	408.7	683.4	820.8	915.3	1104.3	1246.1	1236.8
107.5°	164.9	193.4	221.9	229.0	410.7	652.9	774.0	905.9	1169.6	1367.4	1369.6
110°	185.8	211.6	237.3	243.8	407.5	626.0	735.1	882.5	1177.4	1398.4	1408.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	206.5	231.0	255.5	261.6	407.7	602.4	699.8	850.7	1152.3	1378.6	1393.5
115°	237.5	260.1	282.7	288.5	411.5	575.5	657.5	802.8	1093.4	1311.4	1332.0
117.5°	268.3	288.8	309.4	314.5	419.1	558.6	628.3	759.4	1021.7	1218.5	1241.3
120°	286.1	305.5	324.8	329.7	425.3	552.9	616.6	736.5	976.1	1155.9	1178.1
122.5°	303.7	323.2	342.8	347.6	434.3	549.9	607.7	715.5	931.3	1093.2	1115.1
125°	330.5	348.3	366.0	370.5	446.3	547.4	597.9	689.6	872.9	1010.4	1030.6
127.5°	352.2	370.1	388.2	392.7	458.4	546.0	589.8	668.5	825.9	944.0	961.0
130°	363.9	383.2	402.6	407.4	467.2	546.9	586.7	656.8	796.9	902.0	917.7
132.5°	375.9	395.3	414.6	419.5	474.3	547.4	583.9	646.6	772.1	866.2	880.3
135°	393.9	411.5	429.1	433.5	482.1	546.9	579.3	631.9	736.8	815.6	827.8
137.5°	412.1	429.6	447.0	451.4	493.7	550.3	578.5	622.9	711.7	778.3	788.2
140°	427.3	443.3	459.4	463.4	500.9	550.8	575.8	614.1	690.8	748.4	757.7
142.5°	438.9	453.8	468.7	472.4	506.9	552.8	575.8	609.4	676.8	727.4	735.4
145°	456.8	469.8	482.7	486.0	514.6	552.9	571.9	599.5	654.6	695.9	702.0
147.5°	474.7	487.4	499.9	503.1	526.1	556.6	571.9	593.6	637.0	669.5	674.6
150°	486.3	497.7	509.1	512.0	532.0	558.7	571.9	590.3	626.8	654.3	658.3
152.5°	498.4	507.0	515.7	517.8	535.9	559.9	571.9	587.6	618.8	642.2	645.3
155°	516.3	522.7	529.1	530.7	544.5	562.8	571.9	584.4	609.2	627.8	629.9
157.5°	529.5	535.8	541.9	543.5	553.0	565.6	571.9	581.6	600.9	615.4	616.8
160°	538.5	543.3	548.1	549.3	556.9	566.9	571.9	580.3	596.8	609.2	610.1
162.5°	547.4	551.0	554.7	555.6	561.0	568.3	571.9	579.0	592.9	603.4	604.1
165°	557.1	560.4	563.6	564.5	567.0	570.3	571.9	577.0	587.0	594.5	595.3
167.5°	566.1	567.6	569.2	569.6	571.7	574.4	575.8	579.1	585.6	590.5	590.9
170°	571.9	573.4	575.0	575.4	575.5	575.7	575.8	579.1	585.6	590.5	590.5
172.5°	575.0	575.4	575.7	575.8	575.8	575.8	575.8	578.4	583.5	587.5	587.2
175°	579.3	579.3	579.3	579.3	578.1	576.5	575.8	577.5	580.7	583.2	583.2
177.5°	579.3	579.3	579.3	579.3	578.4	577.2	576.5	577.8	580.5	582.4	582.0
180°	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	491.8	491.8
2.5°	525.1	521.9
5°	675.3	678.5
7.5°	909.5	907.9
10°	1130.8	1145.1
12.5°	1292.1	1295.3
15°	1390.3	1396.5
17.5°	1428.2	1429.8
20°	1429.8	1426.6
22.5°	1412.3	1409.3
25°	1391.8	1390.3
27.5°	1372.8	1374.4
30°	1365.0	1369.7
32.5°	1365.0	1372.8
35°	1368.1	1376.0
37.5°	1366.5	1376.0
40°	1360.2	1371.2
42.5°	1342.8	1350.7
45°	1315.9	1325.4
47.5°	1281.1	1287.5
50°	1236.8	1243.2
52.5°	1181.5	1183.1
55°	1115.0	1121.4
57.5°	1043.9	1045.5
60°	964.8	969.6
62.5°	881.0	881.0
65°	792.4	795.5
67.5°	700.7	708.6
70°	607.4	609.0
72.5°	515.6	515.6
75°	420.7	422.3
77.5°	330.5	330.5
80°	245.2	246.8
82.5°	169.3	172.4
85°	106.0	106.0
87.5°	49.1	44.3
90°	14.8	14.8
92.5°	59.2	47.4
95°	206.3	170.7
97.5°	494.2	426.5
100°	712.1	631.4
102.5°	926.4	857.3
105°	1199.6	1162.5
107.5°	1378.6	1387.6
110°	1446.8	1485.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1452.9	1512.4
115°	1414.4	1496.8
117.5°	1332.7	1424.1
120°	1266.9	1355.7
122.5°	1202.8	1290.4
125°	1111.3	1192.0
127.5°	1029.1	1097.2
130°	980.6	1043.5
132.5°	936.6	992.9
135°	876.3	924.9
137.5°	828.1	867.8
140°	794.9	832.0
142.5°	767.4	799.4
145°	726.2	750.4
147.5°	694.6	714.6
150°	674.6	690.8
152.5°	657.6	669.9
155°	638.0	646.2
157.5°	622.6	628.3
160°	613.4	616.6
162.5°	607.3	610.4
165°	598.6	601.9
167.5°	592.2	593.6
170°	590.5	590.5
172.5°	586.0	584.8
175°	583.2	583.2
177.5°	580.7	579.3
180°	579.3	579.3



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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	6.30	7.20	7.24	8.17	9.43	19.44	20.34	20.38	21.31	22.57
	3H	7.01	7.82	7.96	8.80	10.08	21.26	22.08	22.22	23.05	24.34
	4H	7.31	8.08	8.28	9.06	10.35	21.90	22.67	22.87	23.65	24.95
	6H	7.56	8.27	8.54	9.26	10.56	22.32	23.03	23.30	24.02	25.33
	8H	7.63	8.31	8.62	9.31	10.61	22.44	23.11	23.43	24.12	25.42
	12H	7.65	8.29	8.64	9.29	10.62	22.50	23.14	23.49	24.14	25.47
4H	2H	13.49	14.26	14.47	15.24	16.54	19.72	20.49	20.69	21.47	22.76
	3H	15.07	15.71	16.05	16.72	18.03	21.75	22.40	22.74	23.41	24.72
	4H	15.16	15.75	16.16	16.76	18.09	22.51	23.10	23.51	24.10	25.44
	6H	15.18	15.69	16.19	16.71	18.04	23.04	23.55	24.05	24.58	25.90
	8H	15.16	15.63	16.17	16.65	18.00	23.20	23.67	24.21	24.69	26.04
	12H	15.12	15.55	16.14	16.58	17.93	23.28	23.71	24.31	24.75	26.10
8H	4H	16.60	17.08	17.61	18.10	19.44	22.58	23.05	23.59	24.07	25.42
	6H	16.85	17.24	17.88	18.30	19.65	23.19	23.59	24.23	24.65	25.99
	8H	16.87	17.21	17.91	18.26	19.62	23.41	23.76	24.45	24.80	26.16
	12H	16.84	17.14	17.88	18.19	19.59	23.55	23.85	24.59	24.89	26.30
12H	4H	16.74	17.18	17.77	18.21	19.56	22.53	22.96	23.56	24.00	25.35
	6H	17.10	17.45	18.14	18.50	19.86	23.18	23.53	24.22	24.57	25.93
	8H	17.17	17.48	18.22	18.52	19.93	23.40	23.71	24.45	24.75	26.16