

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: P937562

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937562
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-93050-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

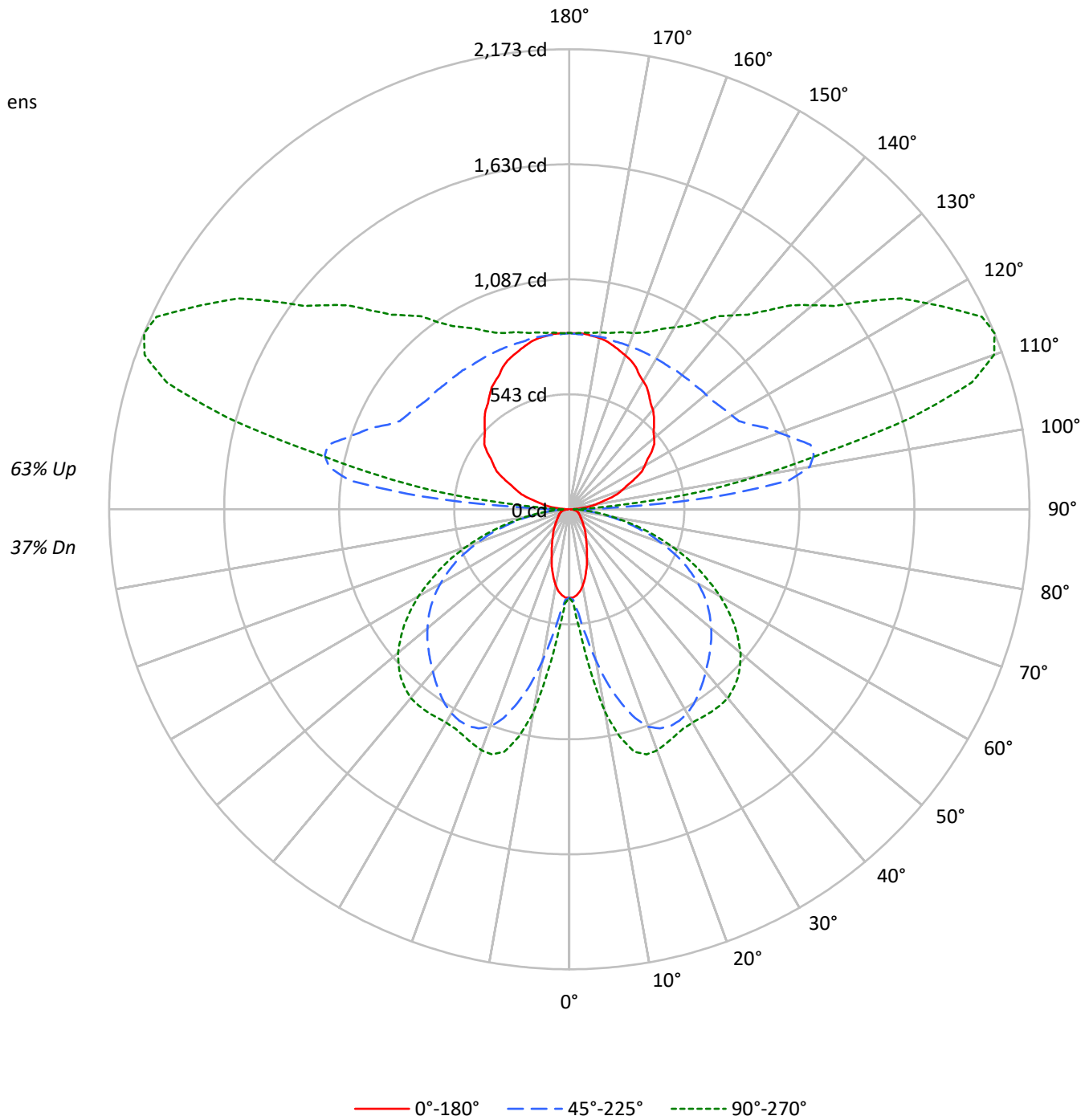
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8629.9 lumens
Efficiency: N/A
Efficacy: 116.9 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 (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	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																					
RCR																																																						
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37																																				
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31																																				
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25																																				
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21																																				
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17																																				
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15																																				
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13																																				
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11																																				
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10																																				
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9																																				
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2584	2584	2584
5°	2523	2985	3473
10°	2288	4351	5758
15°	1944	5683	6953
20°	1582	6585	7086
25°	1319	6889	6942
30°	1111	6930	6929
35°	982	6813	7108
40°	855	6662	7293
45°	774	6550	7322
50°	710	6450	7201
55°	679	6303	6881
60°	694	6023	6376
65°	721	5599	5684
70°	766	4880	4802
75°	846	3975	3748
80°	918	2754	2525
85°	799	1459	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7322 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	0.6
10°-20°	239.5	2.8
20°-30°	418.9	4.9
30°-40°	539.2	6.2
40°-50°	602.2	7.0
50°-60°	576.8	6.7
60°-70°	457.1	5.3
70°-80°	268.8	3.1
80°-90°	77.8	0.9
90°-100°	405.7	4.7
100°-110°	1066.6	12.4
110°-120°	1106.0	12.8
120°-130°	887.1	10.3
130°-140°	696.1	8.1
140°-150°	534.3	6.2
150°-160°	384.8	4.5
160°-170°	235.4	2.7
170°-180°	79.5	0.9
0°-30°	712.3	8.3
0°-40°	1251.5	14.5
0°-60°	2430.6	28.2
0°-90°	3234.3	37.5
90°-120°	2578.3	29.9
90°-150°	4695.8	54.4
90°-180°	5396.0	62.5
0°-180°	8629.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	407	436	492	556	576	38
15°	305	563	948	1150	1186	85
25°	195	638	1130	1179	1181	90
35°	132	610	1064	1124	1168	82
45°	90	486	940	1077	1126	70
55°	64	309	798	927	952	59
65°	51	164	592	666	676	51
75°	38	101	325	357	359	39
85°	13	31	81	89	90	14
90°	6	16	42	21	21	6
95°	54	210	699	360	245	60
105°	192	291	1179	1790	1670	204
115°	341	414	945	1884	2151	337
125°	475	532	859	1452	1713	422
135°	566	623	832	1172	1329	438
145°	656	698	822	1000	1078	411
155°	742	762	822	902	928	341
165°	800	811	822	854	865	226
175°	832	832	827	838	838	79
180°	832	832	832	832	832	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	417.7	417.7	420.3	421.7	424.4	425.7	428.4	431.1	439.2	440.5	443.2
5°	406.9	412.3	429.7	436.5	455.3	480.8	491.5	509.0	545.2	556.0	562.7
7.5°	390.8	402.9	445.9	456.6	503.6	570.8	599.0	636.6	694.3	722.5	745.3
10°	365.3	390.8	467.4	492.9	569.4	671.5	723.9	776.2	863.5	902.5	917.2
12.5°	337.1	378.7	490.2	525.1	635.2	784.3	847.4	905.2	1004.5	1057.0	1065.1
15°	304.9	361.3	511.7	562.7	705.1	878.3	948.1	1019.4	1112.1	1149.7	1159.1
17.5°	276.7	347.8	531.8	585.5	758.8	962.9	1034.2	1093.3	1168.5	1194.0	1200.7
20°	241.7	326.3	545.2	615.1	815.2	1024.8	1093.3	1138.9	1190.0	1206.1	1208.8
22.5°	216.2	303.5	553.3	625.8	852.8	1062.4	1120.1	1156.4	1191.3	1196.7	1198.0
25°	194.7	278.0	552.0	637.9	885.0	1085.2	1129.5	1156.4	1176.5	1179.2	1179.2
27.5°	174.6	249.8	546.6	640.6	909.2	1090.6	1125.5	1144.3	1153.7	1159.1	1159.1
30°	157.1	222.9	533.2	635.2	919.9	1085.2	1113.4	1122.8	1132.2	1140.3	1144.3
32.5°	143.7	197.4	513.0	624.5	921.3	1071.8	1091.9	1097.3	1110.7	1129.5	1136.2
35°	131.6	171.9	490.2	609.7	913.2	1050.3	1063.7	1069.1	1096.0	1124.2	1133.6
37.5°	119.5	153.1	460.6	584.2	901.1	1024.8	1034.2	1043.6	1085.2	1118.8	1129.5
40°	107.4	137.0	425.7	556.0	882.3	993.8	1001.9	1016.6	1071.8	1110.7	1121.5
42.5°	98.0	123.6	388.1	526.4	858.2	958.9	971.0	992.5	1055.7	1097.3	1109.4
45°	90.0	110.1	347.8	486.2	827.3	922.6	940.1	969.6	1036.9	1077.1	1087.9
47.5°	81.9	100.7	306.2	444.5	793.7	886.4	909.2	942.8	1011.3	1050.3	1059.7
50°	75.2	91.3	264.6	400.2	757.4	847.4	874.3	909.2	979.0	1015.3	1027.5
52.5°	69.8	83.3	225.6	355.9	715.8	807.1	838.0	874.3	940.1	975.0	983.1
55°	64.5	76.5	192.0	308.9	672.8	764.1	797.7	832.6	897.1	926.6	932.0
57.5°	61.8	71.2	163.8	264.6	627.2	715.8	753.4	785.6	846.1	868.9	874.3
60°	57.7	67.1	142.4	227.0	577.5	670.1	702.4	734.6	785.6	804.4	808.5
62.5°	53.7	64.5	126.2	190.7	526.4	616.4	648.7	678.2	721.2	734.6	740.0
65°	51.0	61.8	114.2	163.8	474.1	560.0	592.2	617.8	652.7	666.1	668.8
67.5°	48.3	59.1	104.8	141.0	421.7	503.6	527.8	552.0	578.8	592.2	593.6
70°	44.3	56.4	96.7	124.9	368.0	439.2	459.3	484.8	506.3	513.0	517.0
72.5°	41.6	52.4	91.3	112.8	312.9	377.4	396.2	410.9	429.7	436.5	436.5
75°	37.6	47.0	85.9	100.7	256.5	308.9	325.0	339.8	354.5	357.2	353.2
77.5°	33.6	41.6	73.9	84.6	200.1	244.4	257.8	265.9	278.0	280.7	282.0
80°	28.2	36.3	57.7	65.8	145.0	180.0	189.4	196.1	206.8	206.8	209.5
82.5°	21.5	28.2	41.6	47.0	98.0	123.6	131.6	135.6	142.4	142.4	142.4
85°	13.4	17.5	26.9	30.9	59.1	75.2	80.6	81.9	87.3	88.6	88.6
87.5°	6.7	9.4	17.5	18.8	30.9	38.9	38.9	41.6	41.6	40.3	38.9
90°	5.6	10.0	14.5	15.7	24.6	36.5	42.4	37.7	28.3	21.2	21.2
92.5°	22.4	60.3	98.3	107.8	151.6	209.9	239.0	209.5	150.4	106.1	101.9
95°	53.6	123.1	192.7	210.0	373.0	590.2	698.8	623.6	473.1	360.3	347.5
97.5°	92.8	154.1	215.4	230.7	502.4	864.6	1045.7	998.2	903.1	831.7	807.4
100°	122.9	178.5	234.1	248.0	549.5	951.4	1152.4	1155.8	1162.8	1168.0	1139.0
102.5°	148.6	200.5	252.4	265.4	571.1	978.8	1182.5	1243.1	1364.3	1455.2	1430.4
105°	192.1	236.1	280.1	291.1	587.1	981.9	1179.2	1315.0	1586.6	1790.3	1776.9
107.5°	236.8	277.8	318.8	329.0	590.1	938.1	1112.2	1301.6	1680.4	1964.6	1967.8
110°	267.0	304.0	341.0	350.2	585.6	899.4	1056.3	1268.0	1691.6	2009.3	2023.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	296.6	331.9	367.2	375.9	585.8	865.6	1005.4	1222.2	1655.7	1980.8	2002.1
115°	341.3	373.8	406.3	414.4	591.2	826.7	944.6	1153.3	1571.0	1884.2	1913.8
117.5°	385.4	415.0	444.5	451.9	602.1	802.5	902.7	1091.1	1468.0	1750.6	1783.5
120°	411.1	439.0	466.7	473.7	611.1	794.3	885.9	1058.1	1402.4	1660.7	1692.6
122.5°	436.3	464.3	492.4	499.4	623.9	790.0	873.1	1028.2	1338.2	1570.7	1602.3
125°	474.8	500.4	526.0	532.4	641.3	786.5	859.1	990.8	1254.2	1451.8	1480.8
127.5°	506.1	531.9	557.8	564.2	658.6	784.5	847.4	960.5	1186.6	1356.3	1380.8
130°	522.9	550.7	578.5	585.4	671.3	785.7	842.9	943.6	1144.9	1296.0	1318.5
132.5°	540.1	568.0	595.7	602.7	681.5	786.5	839.0	929.2	1109.4	1244.6	1264.8
135°	565.8	591.2	616.5	622.9	692.7	785.7	832.3	907.8	1058.7	1172.0	1189.4
137.5°	592.1	617.1	642.3	648.6	709.4	790.7	831.2	895.0	1022.6	1118.3	1132.6
140°	613.9	637.0	660.1	665.8	719.7	791.4	827.3	882.4	992.6	1075.3	1088.6
142.5°	630.7	652.1	673.4	678.7	728.2	794.2	827.3	875.7	972.5	1045.1	1056.6
145°	656.4	675.0	693.6	698.3	739.4	794.3	821.7	861.3	940.5	999.9	1008.6
147.5°	682.0	700.1	718.2	722.8	755.7	799.7	821.7	852.9	915.2	961.9	969.1
150°	698.8	715.2	731.6	735.7	764.3	802.6	821.7	848.0	900.6	940.1	945.9
152.5°	716.2	728.6	741.0	744.1	770.0	804.4	821.7	844.2	889.1	922.8	927.2
155°	741.9	751.0	760.1	762.4	782.2	808.6	821.7	839.6	875.3	902.1	905.1
157.5°	760.8	769.8	778.7	780.9	794.5	812.7	821.7	835.6	863.4	884.3	886.4
160°	773.6	780.6	787.6	789.3	800.1	814.6	821.7	833.6	857.4	875.3	876.5
162.5°	786.5	791.7	796.9	798.3	806.0	816.5	821.7	831.7	851.9	866.9	868.0
165°	800.5	805.2	809.9	811.1	814.6	819.4	821.7	828.9	843.3	854.1	855.3
167.5°	813.3	815.5	817.8	818.3	821.3	825.3	827.3	832.0	841.4	848.5	849.0
170°	821.7	824.0	826.2	826.7	826.9	827.2	827.3	832.0	841.4	848.5	848.5
172.5°	826.2	826.6	827.2	827.3	827.3	827.3	827.3	831.0	838.5	844.0	843.6
175°	832.3	832.3	832.3	832.3	830.6	828.3	827.3	829.6	834.3	837.9	837.9
177.5°	832.3	832.3	832.3	832.3	831.0	829.3	828.4	830.3	834.0	836.8	836.2
180°	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	417.7	417.7
2.5°	445.9	443.2
5°	573.4	576.1
7.5°	772.2	770.9
10°	960.2	972.3
12.5°	1097.3	1100.0
15°	1180.6	1185.9
17.5°	1212.8	1214.1
20°	1214.1	1211.4
22.5°	1199.4	1196.7
25°	1181.9	1180.6
27.5°	1165.8	1167.1
30°	1159.1	1163.1
32.5°	1159.1	1165.8
35°	1161.8	1168.5
37.5°	1160.4	1168.5
40°	1155.0	1164.4
42.5°	1140.3	1147.0
45°	1117.4	1125.5
47.5°	1087.9	1093.3
50°	1050.3	1055.7
52.5°	1003.2	1004.5
55°	946.8	952.2
57.5°	886.4	887.7
60°	819.2	823.2
62.5°	748.0	748.0
65°	672.8	675.5
67.5°	594.9	601.6
70°	515.7	517.0
72.5°	437.8	437.8
75°	357.2	358.6
77.5°	280.7	280.7
80°	208.2	209.5
82.5°	143.7	146.4
85°	90.0	90.0
87.5°	41.6	37.6
90°	21.2	21.2
92.5°	85.0	68.1
95°	296.3	245.2
97.5°	710.1	612.8
100°	1023.1	907.1
102.5°	1331.0	1231.7
105°	1723.6	1670.2
107.5°	1980.8	1993.7
110°	2078.8	2134.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2087.5	2172.9
115°	2032.2	2150.6
117.5°	1914.8	2046.1
120°	1820.3	1947.8
122.5°	1728.1	1854.0
125°	1596.7	1712.6
127.5°	1478.6	1576.4
130°	1409.0	1499.3
132.5°	1345.7	1426.7
135°	1259.2	1328.9
137.5°	1189.7	1246.8
140°	1142.1	1195.4
142.5°	1102.6	1148.5
145°	1043.4	1078.1
147.5°	997.9	1026.7
150°	969.3	992.6
152.5°	944.8	962.5
155°	916.7	928.3
157.5°	894.5	902.7
160°	881.3	885.9
162.5°	872.5	877.0
165°	860.0	864.7
167.5°	851.0	853.0
170°	848.5	848.5
172.5°	841.9	840.2
175°	837.9	837.9
177.5°	834.3	832.3
180°	832.3	832.3



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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	3.03	3.82	4.08	4.88	6.31	16.20	16.98	17.25	18.04	19.48
	3H	3.73	4.44	4.79	5.50	6.96	18.02	18.73	19.08	19.80	21.25
	4H	4.02	4.69	5.10	5.76	7.23	18.66	19.33	19.73	20.40	21.86
	6H	4.27	4.89	5.35	5.96	7.44	19.09	19.70	20.17	20.78	22.25
	8H	4.34	4.93	5.42	6.02	7.48	19.20	19.79	20.29	20.88	22.35
	12H	4.35	4.91	5.44	5.99	7.49	19.26	19.82	20.36	20.91	22.40
4H	2H	10.23	10.90	11.31	11.97	13.43	16.46	17.13	17.54	18.20	19.66
	3H	11.79	12.35	12.88	13.45	14.92	18.49	19.06	19.58	20.15	21.63
	4H	11.88	12.40	12.97	13.48	14.98	19.25	19.77	20.35	20.86	22.35
	6H	11.89	12.33	12.99	13.44	14.93	19.79	20.23	20.89	21.34	22.83
	8H	11.86	12.28	12.96	13.38	14.88	19.94	20.36	21.04	21.46	22.97
	12H	11.82	12.19	12.93	13.31	14.82	20.03	20.40	21.15	21.52	23.03
8H	4H	13.32	13.73	14.42	14.83	16.34	19.31	19.72	20.41	20.83	22.33
	6H	13.55	13.90	14.68	15.04	16.54	19.93	20.27	21.05	21.42	22.92
	8H	13.57	13.87	14.70	15.00	16.52	20.15	20.45	21.28	21.57	23.09
	12H	13.54	13.80	14.67	14.92	16.48	20.28	20.55	21.42	21.67	23.23
12H	4H	13.45	13.83	14.57	14.94	16.46	19.26	19.63	20.38	20.75	22.26
	6H	13.81	14.11	14.94	15.24	16.76	19.91	20.21	21.04	21.34	22.86
	8H	13.88	14.14	15.01	15.26	16.82	20.14	20.40	21.27	21.52	23.08