

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: P937094

Luminaire Tested: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937094
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

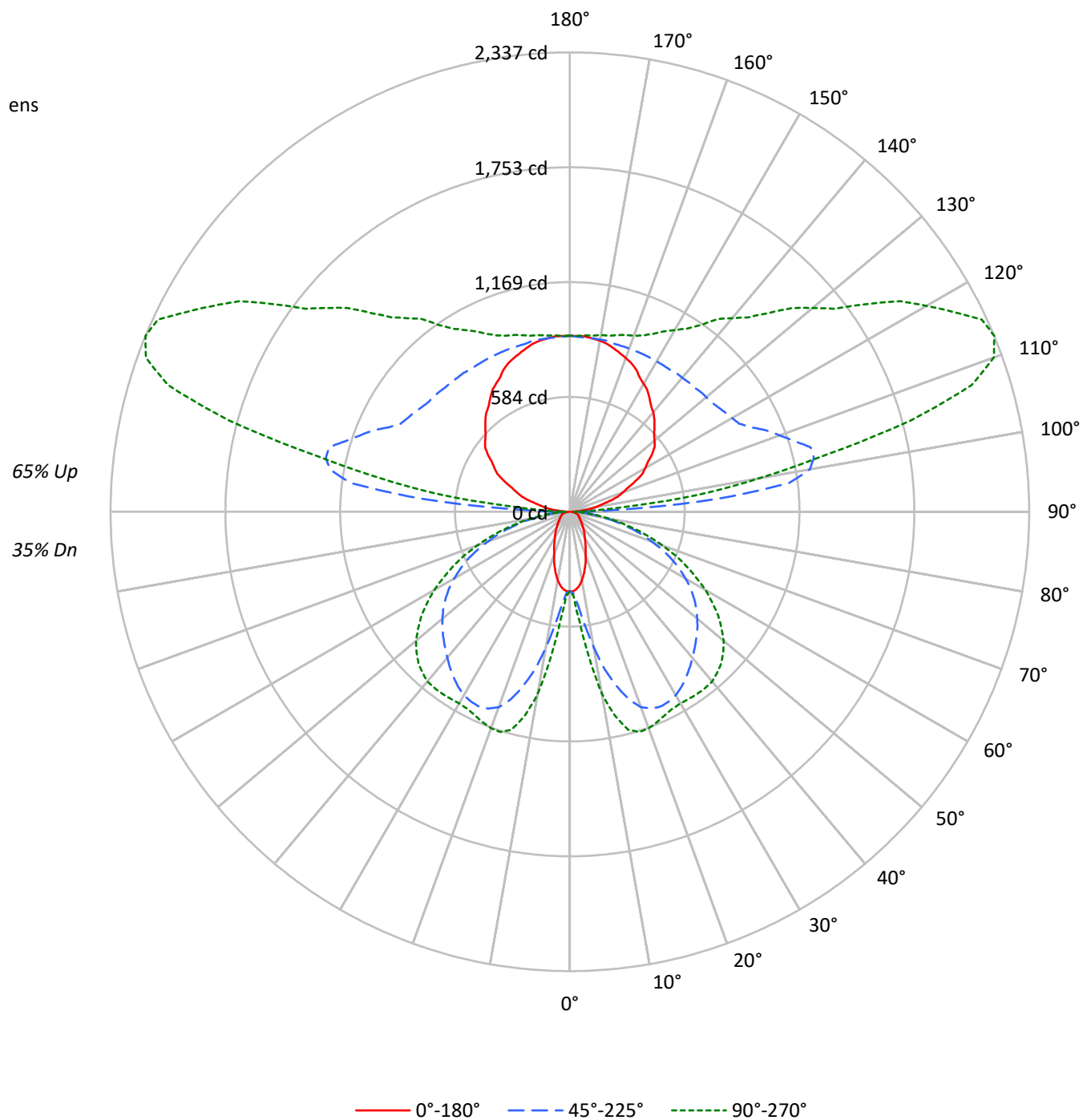
Lumens per Lamp: N/A
Luminaire Lumens: 8933.3 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

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: P937094

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-3500K

Luminous Intensity Polar Plot



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CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35		
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29		
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23		
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19		
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16		
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14		
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12		
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10		
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9		
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8		
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1832	2168	2521
10°	1662	3160	4179
15°	1413	4128	5046
20°	1150	4784	5143
25°	959	5006	5039
30°	808	5037	5029
35°	715	4954	5159
40°	623	4845	5294
45°	564	4765	5314
50°	518	4694	5226
55°	496	4589	4994
60°	508	4388	4628
65°	528	4081	4126
70°	563	3559	3486
75°	623	2902	2720
80°	681	2012	1832
85°	606	1068	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5314 cd/sqm

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CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	0.6
10°-20°	231.7	2.6
20°-30°	405.3	4.5
30°-40°	521.8	5.8
40°-50°	582.8	6.5
50°-60°	558.2	6.2
60°-70°	442.4	5.0
70°-80°	260.1	2.9
80°-90°	75.7	0.8
90°-100°	436.4	4.9
100°-110°	1147.2	12.8
110°-120°	1189.5	13.3
120°-130°	954.1	10.7
130°-140°	748.6	8.4
140°-150°	574.6	6.4
150°-160°	413.8	4.6
160°-170°	253.2	2.8
170°-180°	85.5	1.0
0°-30°	689.4	7.7
0°-40°	1211.2	13.6
0°-60°	2352.2	26.3
0°-90°	3130.4	35.0
90°-120°	2773.0	31.0
90°-150°	5050.3	56.5
90°-180°	5803.0	65.0
0°-180°	8933.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	394	422	476	538	558	36
15°	295	545	918	1112	1148	82
25°	188	617	1093	1141	1142	87
35°	127	590	1029	1088	1131	80
45°	87	470	910	1042	1089	67
55°	62	299	772	897	922	57
65°	49	158	573	645	654	49
75°	36	98	314	346	347	38
85°	13	30	78	86	87	14
90°	6	17	46	23	23	6
95°	58	226	752	388	264	64
105°	207	313	1268	1925	1796	219
115°	367	446	1016	2026	2313	363
125°	511	572	924	1561	1842	453
135°	608	670	895	1260	1429	471
145°	706	751	884	1075	1160	442
155°	798	820	884	970	998	367
165°	861	872	884	919	930	243
175°	895	895	890	901	901	85
180°	895	895	895	895	895	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2	404.2
2.5°	404.2	404.2	406.8	408.1	410.7	412.0	414.6	417.3	425.0	426.3	428.9
5°	393.8	399.0	415.9	422.4	440.6	465.3	475.7	492.5	527.7	538.1	544.6
7.5°	378.2	389.9	431.5	441.9	487.4	552.3	579.7	616.1	671.9	699.2	721.3
10°	353.5	378.2	452.3	477.0	551.1	649.8	700.6	751.3	835.7	873.4	887.7
12.5°	326.3	366.5	474.4	508.1	614.7	759.0	820.2	876.0	972.2	1022.9	1030.6
15°	295.1	349.6	495.2	544.6	682.4	850.0	917.6	986.4	1076.2	1112.5	1121.6
17.5°	267.7	336.6	514.7	566.7	734.3	931.9	1000.8	1058.0	1130.7	1155.4	1161.9
20°	233.9	315.8	527.7	595.3	789.0	991.7	1058.0	1102.1	1151.6	1167.2	1169.8
22.5°	209.2	293.7	535.5	605.6	825.3	1028.1	1083.9	1119.1	1152.8	1158.1	1159.3
25°	188.5	269.0	534.2	617.3	856.5	1050.2	1093.0	1119.1	1138.6	1141.2	1141.2
27.5°	169.0	241.8	529.0	620.0	879.9	1055.3	1089.2	1107.4	1116.5	1121.6	1121.6
30°	152.0	215.8	516.0	614.7	890.3	1050.2	1077.4	1086.5	1095.6	1103.5	1107.4
32.5°	139.1	191.1	496.5	604.4	891.6	1037.1	1056.7	1061.8	1074.8	1093.0	1099.5
35°	127.3	166.4	474.4	590.0	883.8	1016.4	1029.4	1034.6	1060.6	1087.9	1096.9
37.5°	115.7	148.2	445.8	565.4	872.1	991.7	1000.8	1009.9	1050.2	1082.7	1093.0
40°	104.0	132.6	412.0	538.1	853.9	961.8	969.6	983.9	1037.1	1074.8	1085.3
42.5°	94.9	119.6	375.6	509.5	830.5	928.0	939.7	960.5	1021.6	1061.8	1073.6
45°	87.1	106.6	336.6	470.4	800.6	892.9	909.8	938.4	1003.4	1042.4	1052.7
47.5°	79.3	97.5	296.3	430.2	768.1	857.9	879.9	912.4	978.7	1016.4	1025.5
50°	72.8	88.4	256.0	387.3	733.0	820.2	846.1	879.9	947.5	982.6	994.3
52.5°	67.5	80.6	218.3	344.4	692.7	781.1	811.1	846.1	909.8	943.6	951.4
55°	62.4	74.1	185.9	298.9	651.2	739.5	772.0	805.8	868.2	896.8	902.0
57.5°	59.8	68.9	158.5	256.0	607.0	692.7	729.2	760.4	818.8	840.9	846.1
60°	55.9	65.0	137.8	219.7	558.9	648.6	679.8	711.0	760.4	778.5	782.5
62.5°	52.0	62.4	122.2	184.6	509.5	596.6	627.7	656.4	698.0	711.0	716.2
65°	49.4	59.8	110.5	158.5	458.8	542.0	573.2	597.9	631.7	644.7	647.3
67.5°	46.8	57.2	101.4	136.4	408.1	487.4	510.8	534.2	560.2	573.2	574.4
70°	42.9	54.6	93.6	120.8	356.1	425.0	444.5	469.2	490.0	496.5	500.4
72.5°	40.3	50.7	88.4	109.2	302.8	365.2	383.4	397.7	415.9	422.4	422.4
75°	36.4	45.4	83.1	97.5	248.3	298.9	314.5	328.8	343.1	345.7	341.9
77.5°	32.5	40.3	71.5	81.9	193.7	236.5	249.5	257.4	269.0	271.6	273.0
80°	27.3	35.1	55.9	63.7	140.4	174.1	183.2	189.7	200.2	200.2	202.7
82.5°	20.8	27.3	40.3	45.4	94.9	119.6	127.3	131.3	137.8	137.8	137.8
85°	13.0	16.9	26.0	29.8	57.2	72.8	78.0	79.3	84.5	85.8	85.8
87.5°	6.5	9.1	16.9	18.2	29.8	37.7	37.7	40.3	40.3	39.0	37.7
90°	6.0	10.9	15.7	16.9	26.5	39.2	45.6	40.6	30.4	22.9	22.9
92.5°	24.0	64.9	105.8	116.0	163.1	225.8	257.2	225.4	161.8	114.1	109.6
95°	57.7	132.5	207.2	225.9	401.1	634.7	751.6	670.6	508.8	387.5	373.7
97.5°	99.7	165.7	231.7	248.2	540.3	929.9	1124.6	1073.5	971.2	894.6	868.4
100°	132.2	192.0	251.8	266.8	591.0	1023.3	1239.4	1243.1	1250.6	1256.2	1225.0
102.5°	159.8	215.6	271.4	285.4	614.2	1052.6	1271.8	1336.9	1467.3	1565.0	1538.3
105°	206.7	254.0	301.2	313.0	631.4	1055.9	1268.2	1414.3	1706.3	1925.4	1911.1
107.5°	254.8	298.8	342.8	353.9	634.6	1008.9	1196.1	1399.8	1807.3	2112.9	2116.4
110°	287.2	326.9	366.7	376.7	629.8	967.3	1136.1	1363.8	1819.3	2161.0	2175.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	319.0	356.9	394.8	404.3	629.9	930.9	1081.4	1314.5	1780.7	2130.3	2153.3
115°	367.1	402.0	437.0	445.7	635.8	889.2	1015.9	1240.4	1689.5	2026.4	2058.3
117.5°	414.5	446.3	478.1	486.1	647.7	863.1	970.8	1173.5	1578.8	1882.8	1918.0
120°	442.2	472.0	501.9	509.4	657.2	854.3	952.8	1138.0	1508.3	1786.1	1820.4
122.5°	469.2	499.4	529.6	537.1	671.0	849.6	939.0	1105.7	1439.3	1689.4	1723.2
125°	510.7	538.2	565.6	572.5	689.6	845.8	923.9	1065.6	1348.8	1561.3	1592.6
127.5°	544.3	572.1	599.8	606.8	708.3	843.7	911.3	1033.0	1276.2	1458.6	1484.9
130°	562.3	592.2	622.1	629.6	721.9	845.1	906.6	1014.8	1231.4	1393.8	1418.1
132.5°	580.9	610.9	640.8	648.3	733.0	845.8	902.3	999.2	1193.1	1338.5	1360.3
135°	608.5	635.8	663.1	669.9	745.0	845.1	895.2	976.4	1138.7	1260.4	1279.2
137.5°	636.8	663.8	690.7	697.5	763.0	850.3	893.9	962.5	1099.8	1202.7	1218.0
140°	660.3	685.1	709.9	716.1	773.9	851.2	889.7	949.0	1067.5	1156.5	1170.8
142.5°	678.3	701.3	724.2	729.9	783.2	854.3	889.7	941.8	1045.9	1124.0	1136.3
145°	705.9	726.0	745.9	751.0	795.3	854.3	883.7	926.4	1011.5	1075.4	1084.7
147.5°	733.5	753.0	772.6	777.4	812.9	860.1	883.7	917.3	984.2	1034.5	1042.3
150°	751.6	769.2	786.8	791.2	822.0	863.2	883.7	912.0	968.6	1011.1	1017.4
152.5°	770.2	783.5	796.9	800.2	828.0	865.1	883.7	907.9	956.2	992.4	997.2
155°	797.8	807.7	817.5	820.1	841.3	869.6	883.7	902.9	941.4	970.3	973.4
157.5°	818.2	827.8	837.4	839.8	854.5	873.9	883.7	898.7	928.6	951.0	953.2
160°	832.1	839.5	847.0	848.8	860.5	876.0	883.7	896.5	922.2	941.4	942.6
162.5°	845.8	851.5	857.1	858.5	867.0	878.1	883.7	894.6	916.2	932.4	933.5
165°	860.9	865.9	871.0	872.3	876.1	881.2	883.7	891.5	907.0	918.6	919.9
167.5°	874.7	877.1	879.6	880.1	883.3	887.6	889.7	894.8	904.9	912.6	913.1
170°	883.7	886.2	888.6	889.2	889.3	889.6	889.7	894.8	904.9	912.6	912.6
172.5°	888.6	889.1	889.6	889.7	889.7	889.7	889.7	893.7	901.8	907.8	907.3
175°	895.2	895.2	895.2	895.2	893.3	890.9	889.7	892.3	897.4	901.2	901.2
177.5°	895.2	895.2	895.2	895.2	893.7	891.9	890.9	892.9	896.9	899.9	899.4
180°	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	404.2	404.2
2.5°	431.5	428.9
5°	554.9	557.6
7.5°	747.3	746.0
10°	929.3	941.0
12.5°	1061.8	1064.4
15°	1142.5	1147.7
17.5°	1173.7	1174.9
20°	1174.9	1172.3
22.5°	1160.7	1158.1
25°	1143.7	1142.5
27.5°	1128.1	1129.5
30°	1121.6	1125.6
32.5°	1121.6	1128.1
35°	1124.2	1130.7
37.5°	1123.0	1130.7
40°	1117.7	1126.9
42.5°	1103.5	1110.0
45°	1081.4	1089.2
47.5°	1052.7	1058.0
50°	1016.4	1021.6
52.5°	970.8	972.2
55°	916.3	921.5
57.5°	857.9	859.1
60°	792.8	796.7
62.5°	723.9	723.9
65°	651.2	653.8
67.5°	575.8	582.3
70°	499.1	500.4
72.5°	423.7	423.7
75°	345.7	347.0
77.5°	271.6	271.6
80°	201.5	202.7
82.5°	139.1	141.7
85°	87.1	87.1
87.5°	40.3	36.4
90°	22.9	22.9
92.5°	91.5	73.3
95°	318.8	263.8
97.5°	763.7	659.0
100°	1100.4	975.7
102.5°	1431.5	1324.7
105°	1853.6	1796.2
107.5°	2130.2	2144.1
110°	2235.8	2295.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2245.1	2336.9
115°	2185.6	2312.9
117.5°	2059.3	2200.6
120°	1957.7	2094.9
122.5°	1858.5	1993.9
125°	1717.3	1842.0
127.5°	1590.1	1695.4
130°	1515.2	1612.4
132.5°	1447.3	1534.3
135°	1354.2	1429.2
137.5°	1279.5	1340.9
140°	1228.3	1285.7
142.5°	1185.8	1235.2
145°	1122.1	1159.5
147.5°	1073.2	1104.2
150°	1042.5	1067.5
152.5°	1016.1	1035.1
155°	986.0	998.5
157.5°	962.0	970.8
160°	947.8	952.8
162.5°	938.4	943.2
165°	924.9	929.9
167.5°	915.2	917.4
170°	912.6	912.6
172.5°	905.4	903.6
175°	901.2	901.2
177.5°	897.3	895.2
180°	895.2	895.2

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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	1.64	2.40	2.71	3.48	4.95	14.82	15.58	15.89	16.66	18.13
	3H	2.34	3.02	3.41	4.11	5.59	16.65	17.34	17.73	18.42	19.91
	4H	2.63	3.28	3.72	4.37	5.86	17.29	17.94	18.38	19.03	20.52
	6H	2.87	3.48	3.97	4.56	6.07	17.72	18.32	18.81	19.41	20.91
	8H	2.94	3.51	4.04	4.62	6.11	17.83	18.41	18.94	19.51	21.01
	12H	2.95	3.50	4.06	4.60	6.12	17.90	18.44	19.01	19.54	21.06
4H	2H	8.84	9.50	9.94	10.58	12.07	15.08	15.73	16.18	16.82	18.31
	3H	10.40	10.95	11.50	12.06	13.56	17.12	17.66	18.22	18.77	20.28
	4H	10.49	10.99	11.60	12.10	13.62	17.88	18.38	18.99	19.48	21.01
	6H	10.50	10.93	11.61	12.05	13.57	18.41	18.84	19.53	19.97	21.49
	8H	10.47	10.87	11.59	11.99	13.52	18.57	18.98	19.69	20.09	21.63
	12H	10.42	10.79	11.56	11.92	13.46	18.66	19.03	19.80	20.16	21.70
8H	4H	11.93	12.33	13.04	13.45	14.98	17.93	18.33	19.05	19.45	20.99
	6H	12.17	12.50	13.30	13.66	15.19	18.56	18.89	19.69	20.05	21.58
	8H	12.18	12.47	13.33	13.61	15.16	18.77	19.07	19.92	20.21	21.76
	12H	12.15	12.40	13.29	13.54	15.12	18.91	19.17	20.06	20.31	21.89
12H	4H	12.07	12.43	13.20	13.56	15.10	17.88	18.24	19.01	19.37	20.91
	6H	12.42	12.72	13.57	13.85	15.41	18.54	18.83	19.68	19.97	21.52
	8H	12.49	12.74	13.64	13.88	15.47	18.76	19.02	19.91	20.16	21.74