

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: P936694

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936694
REPORT IS A COMBINATION OF REPORTS P933485 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-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

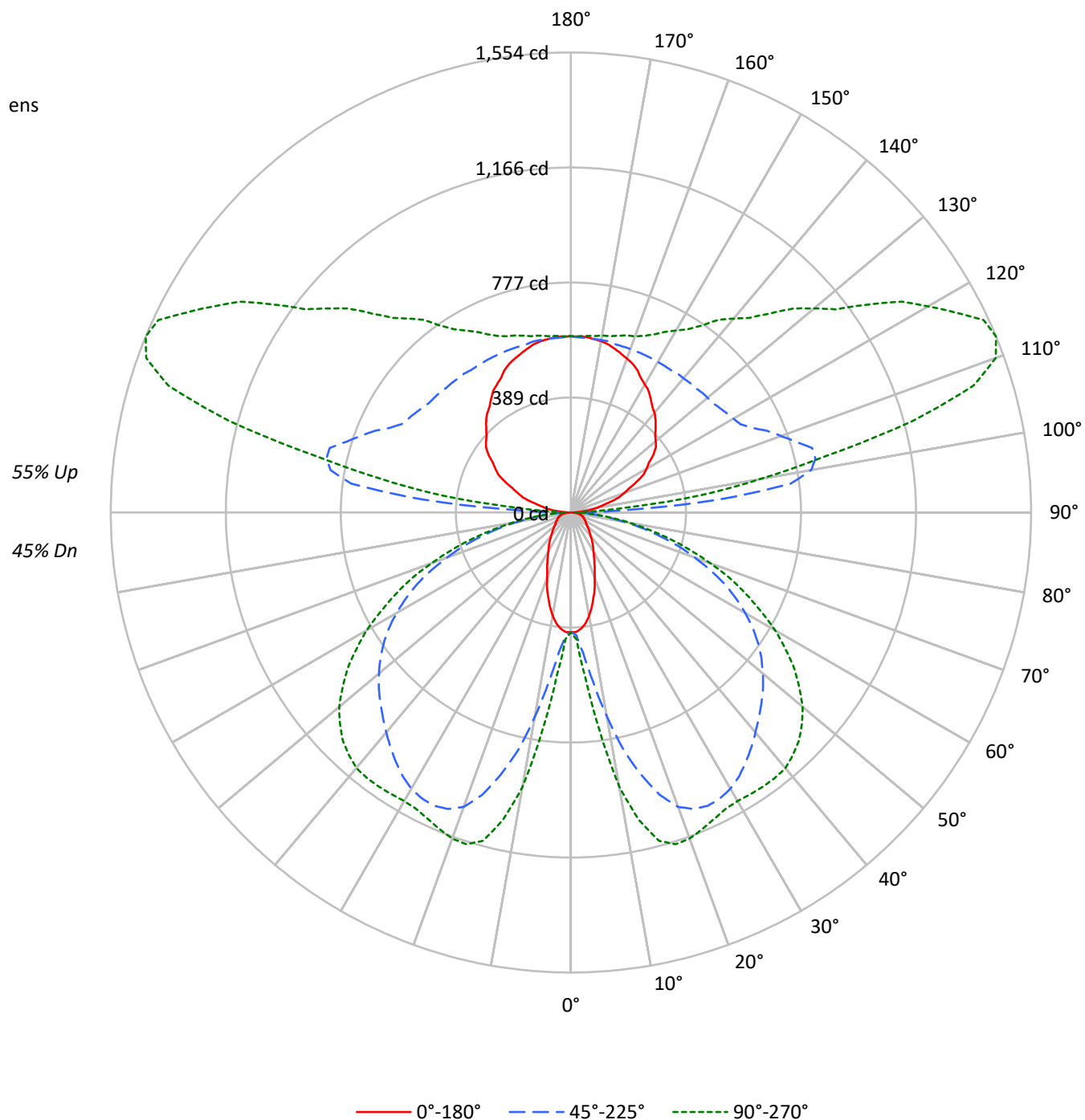
Lumens per Lamp: N/A
Luminaire Lumens: 6987.5 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 56.8
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: P936694

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

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

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

TEST NUMBER: P936694

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	0.7
10°-20°	231.7	3.3
20°-30°	405.3	5.8
30°-40°	521.8	7.5
40°-50°	582.8	8.3
50°-60°	558.2	8.0
60°-70°	442.4	6.3
70°-80°	260.1	3.7
80°-90°	74.5	1.1
90°-100°	290.1	4.2
100°-110°	762.7	10.9
110°-120°	790.9	11.3
120°-130°	634.4	9.1
130°-140°	497.8	7.1
140°-150°	382.1	5.5
150°-160°	275.1	3.9
160°-170°	168.3	2.4
170°-180°	56.9	0.8
0°-30°	689.4	9.9
0°-40°	1211.2	17.3
0°-60°	2352.2	33.7
0°-90°	3129.3	44.8
90°-120°	1843.7	26.4
90°-150°	3357.9	48.1
90°-180°	3858.0	55.2
0°-180°	6987.5	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°	4	11	30	15	15	4
95°	38	150	500	258	175	43
105°	137	208	843	1280	1194	146
115°	244	296	676	1347	1538	241
125°	340	381	614	1038	1225	301
135°	405	445	595	838	950	313
145°	469	499	588	715	771	294
155°	530	545	588	645	664	244
165°	572	580	588	611	618	162
175°	595	595	592	599	599	56
180°	595	595	595	595	595	

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

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°	4.0	7.2	10.4	11.1	17.5	26.1	30.3	26.9	20.3	15.2	15.2
92.5°	16.0	43.1	70.3	77.1	108.4	150.1	170.9	149.8	107.6	75.9	72.9
95°	38.4	88.1	137.8	150.2	266.7	422.0	499.7	445.9	338.4	257.7	248.5
97.5°	66.3	110.1	154.0	164.9	359.2	618.2	747.8	713.8	645.7	594.8	577.3
100°	87.9	127.6	167.3	177.3	392.9	680.3	824.0	826.6	831.5	835.2	814.4
102.5°	106.3	143.4	180.4	189.7	408.3	699.9	845.6	889.0	975.6	1040.5	1022.8
105°	137.4	168.8	200.3	208.1	419.9	702.1	843.2	940.3	1134.6	1280.2	1270.6
107.5°	169.4	198.6	227.9	235.3	421.9	670.8	795.3	930.7	1201.7	1404.9	1407.2
110°	190.9	217.3	243.9	250.5	418.8	643.1	755.3	906.8	1209.6	1436.7	1446.7

TEST NUMBER: P936694

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

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	212.1	237.3	262.5	268.8	418.9	619.0	719.0	873.9	1183.9	1416.4	1431.7
115°	244.1	267.3	290.6	296.4	422.8	591.3	675.5	824.8	1123.4	1347.3	1368.4
117.5°	275.6	296.7	317.8	323.2	430.6	573.8	645.5	780.2	1049.7	1251.9	1275.3
120°	294.0	313.9	333.8	338.8	437.0	568.0	633.5	756.6	1002.8	1187.5	1210.3
122.5°	311.9	332.0	352.0	357.1	446.1	564.9	624.3	735.2	957.0	1123.3	1145.7
125°	339.5	357.8	376.1	380.6	458.5	562.4	614.3	708.5	896.9	1038.2	1058.9
127.5°	361.9	380.3	398.7	403.4	470.9	561.0	605.9	686.8	848.6	969.9	987.3
130°	373.8	393.7	413.7	418.6	479.9	561.8	602.7	674.7	818.7	926.7	942.8
132.5°	386.2	406.1	426.1	431.0	487.3	562.4	600.0	664.4	793.3	889.9	904.4
135°	404.7	422.8	440.8	445.4	495.3	561.8	595.2	649.1	757.1	838.0	850.5
137.5°	423.5	441.4	459.3	463.8	507.3	565.3	594.4	640.0	731.3	799.7	809.9
140°	439.0	455.5	472.0	476.2	514.6	565.9	591.6	631.0	709.8	768.9	778.4
142.5°	451.0	466.2	481.5	485.3	520.7	567.9	591.6	626.2	695.5	747.4	755.6
145°	469.4	482.7	496.0	499.3	528.8	568.0	587.6	615.9	672.6	715.0	721.2
147.5°	487.7	500.7	513.7	516.9	540.4	571.9	587.6	609.9	654.4	687.8	692.9
150°	499.7	511.4	523.2	526.1	546.6	573.9	587.6	606.4	644.1	672.3	676.5
152.5°	512.1	521.0	529.8	532.1	550.6	575.3	587.6	603.7	635.8	659.9	663.1
155°	530.4	537.0	543.6	545.3	559.4	578.2	587.6	600.4	625.9	645.1	647.2
157.5°	544.0	550.4	556.8	558.4	568.1	581.1	587.6	597.5	617.3	632.3	633.7
160°	553.2	558.2	563.2	564.4	572.2	582.5	587.6	596.1	613.1	625.9	626.7
162.5°	562.4	566.2	569.9	570.8	576.5	583.9	587.6	594.8	609.2	620.0	620.7
165°	572.4	575.8	579.1	579.9	582.5	585.9	587.6	592.7	603.0	610.8	611.6
167.5°	581.6	583.1	584.8	585.2	587.3	590.1	591.6	595.0	601.7	606.8	607.2
170°	587.6	589.2	590.8	591.2	591.3	591.5	591.6	595.0	601.7	606.8	606.8
172.5°	590.8	591.2	591.5	591.6	591.6	591.6	591.6	594.3	599.6	603.6	603.3
175°	595.2	595.2	595.2	595.2	594.0	592.3	591.6	593.2	596.6	599.1	599.1
177.5°	595.2	595.2	595.2	595.2	594.2	592.9	592.3	593.7	596.3	598.4	598.0
180°	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2

TEST NUMBER: P936694

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

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°	15.2	15.2
92.5°	60.8	48.7
95°	211.9	175.4
97.5°	507.8	438.2
100°	731.6	648.6
102.5°	951.8	880.7
105°	1232.5	1194.3
107.5°	1416.4	1425.6
110°	1486.4	1526.3

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

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1492.7	1553.8
115°	1453.1	1537.8
117.5°	1369.3	1463.2
120°	1301.6	1392.8
122.5°	1235.8	1325.8
125°	1141.8	1224.7
127.5°	1057.3	1127.2
130°	1007.5	1072.1
132.5°	962.3	1020.2
135°	900.4	950.3
137.5°	850.8	891.6
140°	816.6	854.8
142.5°	788.4	821.2
145°	746.1	770.9
147.5°	713.6	734.2
150°	693.1	709.8
152.5°	675.7	688.3
155°	655.5	663.9
157.5°	639.6	645.5
160°	630.1	633.5
162.5°	623.9	627.1
165°	614.9	618.3
167.5°	608.5	610.0
170°	606.8	606.8
172.5°	602.0	600.8
175°	599.1	599.1
177.5°	596.6	595.2
180°	595.2	595.2

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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	2.69	3.54	3.68	4.55	5.89	15.87	16.72	16.87	17.73	19.07
	3H	3.40	4.16	4.40	5.18	6.54	17.71	18.47	18.71	19.49	20.85
	4H	3.69	4.42	4.71	5.44	6.81	18.36	19.08	19.37	20.10	21.47
	6H	3.94	4.61	4.97	5.64	7.02	18.79	19.45	19.81	20.48	21.86
	8H	4.01	4.65	5.05	5.69	7.07	18.91	19.54	19.94	20.59	21.96
	12H	4.03	4.63	5.07	5.67	7.07	18.97	19.58	20.01	20.62	22.02
4H	2H	9.91	10.63	10.93	11.65	13.02	16.15	16.87	17.17	17.89	19.26
	3H	11.47	12.08	12.51	13.13	14.51	18.19	18.80	19.22	19.85	21.23
	4H	11.57	12.12	12.61	13.17	14.57	18.96	19.51	20.00	20.55	21.96
	6H	11.58	12.06	12.63	13.12	14.52	19.50	19.97	20.54	21.04	22.44
	8H	11.56	12.00	12.61	13.06	14.48	19.66	20.10	20.71	21.16	22.58
	12H	11.51	11.92	12.58	12.99	14.41	19.75	20.16	20.82	21.23	22.65
8H	4H	13.01	13.46	14.06	14.52	15.93	19.02	19.46	20.07	20.52	21.94
	6H	13.25	13.62	14.33	14.72	16.14	19.64	20.02	20.72	21.12	22.53
	8H	13.27	13.60	14.35	14.68	16.11	19.86	20.19	20.95	21.27	22.71
	12H	13.24	13.53	14.33	14.61	16.08	20.01	20.30	21.09	21.37	22.85
12H	4H	13.16	13.56	14.22	14.63	16.05	18.97	19.37	20.04	20.45	21.87
	6H	13.51	13.84	14.59	14.92	16.36	19.63	19.95	20.71	21.04	22.47
	8H	13.58	13.87	14.67	14.95	16.42	19.86	20.14	20.94	21.22	22.70