

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: P937043

Luminaire Tested: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

**Test Information**

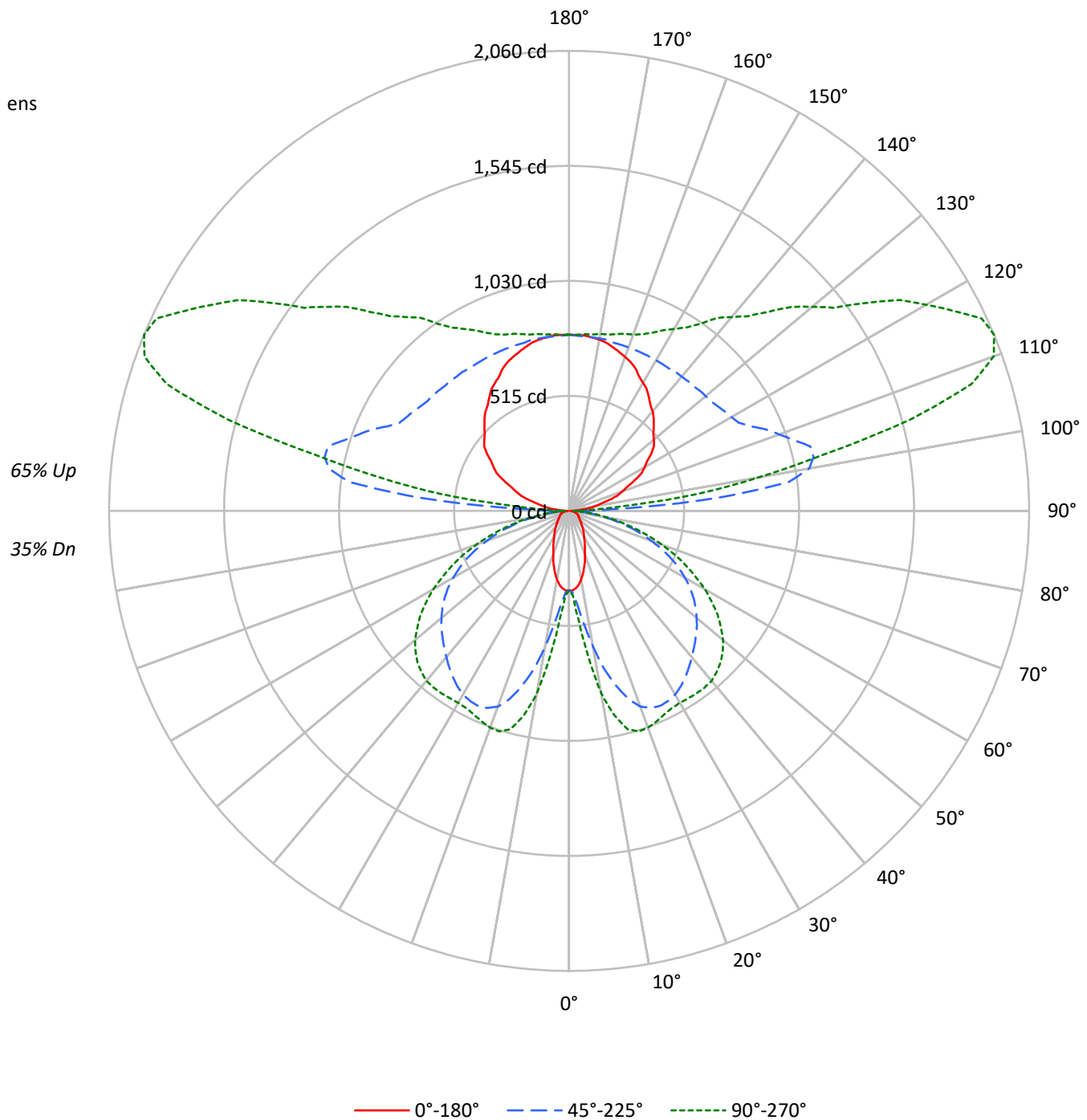
Test Method: LM-79-2019  
Report Number: P937043  
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7874.2 lumens  
Efficiency: N/A  
Efficacy: 114.5 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 (A<sub>in</sub>): 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	0
RCR																					
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35			35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29			29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23			23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19			19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16			16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14			14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12			12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10			10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9			9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8			8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7			7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1653	1653	1653
5°	1615	1911	2222
10°	1465	2785	3683
15°	1245	3639	4448
20°	1013	4216	4533
25°	845	4413	4441
30°	713	4440	4433
35°	630	4366	4547
40°	549	4271	4666
45°	498	4200	4684
50°	456	4137	4607
55°	437	4045	4403
60°	448	3868	4080
65°	466	3597	3637
70°	496	3137	3073
75°	550	2557	2398
80°	601	1774	1615
85°	531	942	827

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4684 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	0.6
10°-20°	204.3	2.6
20°-30°	357.3	4.5
30°-40°	459.9	5.8
40°-50°	513.7	6.5
50°-60°	492.0	6.2
60°-70°	390.0	5.0
70°-80°	229.3	2.9
80°-90°	66.7	0.8
90°-100°	384.6	4.9
100°-110°	1011.1	12.8
110°-120°	1048.5	13.3
120°-130°	841.0	10.7
130°-140°	659.9	8.4
140°-150°	506.5	6.4
150°-160°	364.8	4.6
160°-170°	223.2	2.8
170°-180°	75.4	1.0
0°-30°	607.6	7.7
0°-40°	1067.6	13.6
0°-60°	2073.3	26.3
0°-90°	2759.3	35.0
90°-120°	2444.2	31.0
90°-150°	4451.6	56.5
90°-180°	5115.0	65.0
0°-180°	7874.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	356	356	356	356	356	
5°	347	372	419	474	492	32
15°	260	480	809	981	1012	72
25°	166	544	964	1006	1007	77
35°	112	520	907	959	997	70
45°	77	415	802	919	960	59
55°	55	264	680	790	812	50
65°	44	140	505	568	576	43
75°	32	86	277	305	306	34
85°	11	26	69	76	77	12
90°	5	15	40	20	20	5
95°	51	199	662	342	232	56
105°	182	276	1118	1697	1583	193
115°	324	393	896	1786	2039	320
125°	450	505	814	1376	1624	400
135°	536	590	789	1111	1260	415
145°	622	662	779	948	1022	390
155°	703	723	779	855	880	323
165°	759	769	779	810	820	214
175°	789	789	784	794	794	75
180°	789	789	789	789	789	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	356.3	356.3	358.6	359.8	362.0	363.2	365.5	367.8	374.6	375.7	378.0
5°	347.1	351.7	366.6	372.3	388.4	410.2	419.3	434.2	465.2	474.3	480.0
7.5°	333.4	343.7	380.3	389.5	429.6	486.9	510.9	543.1	592.3	616.3	635.8
10°	311.6	333.4	398.7	420.5	485.7	572.8	617.5	662.2	736.6	769.8	782.5
12.5°	287.6	323.0	418.2	447.9	541.9	669.0	722.9	772.1	856.9	901.6	908.5
15°	260.1	308.2	436.5	480.0	601.5	749.2	808.9	869.5	948.6	980.6	988.7
17.5°	236.0	296.7	453.7	499.5	647.3	821.4	882.1	932.5	996.7	1018.5	1024.2
20°	206.2	278.4	465.2	524.7	695.4	874.1	932.5	971.5	1015.0	1028.8	1031.1
22.5°	184.4	258.9	472.0	533.8	727.5	906.2	955.4	986.4	1016.2	1020.8	1021.9
25°	166.1	237.1	470.9	544.2	755.0	925.7	963.5	986.4	1003.6	1005.9	1005.9
27.5°	149.0	213.1	466.3	546.5	775.6	930.2	960.0	976.1	984.1	988.7	988.7
30°	134.0	190.2	454.8	541.9	784.8	925.7	949.7	957.7	965.8	972.7	976.1
32.5°	122.6	168.4	437.7	532.7	785.9	914.2	931.4	936.0	947.4	963.5	969.2
35°	112.2	146.7	418.2	520.1	779.1	895.9	907.3	912.0	934.8	958.9	966.9
37.5°	102.0	130.6	393.0	498.4	768.7	874.1	882.1	890.2	925.7	954.3	963.5
40°	91.6	116.8	363.2	474.3	752.7	847.8	854.6	867.3	914.2	947.4	956.6
42.5°	83.6	105.4	331.1	449.1	732.1	818.0	828.3	846.6	900.5	936.0	946.3
45°	76.8	94.0	296.7	414.7	705.7	787.1	801.9	827.1	884.4	918.8	927.9
47.5°	69.9	85.9	261.2	379.2	677.1	756.2	775.6	804.2	862.7	895.9	903.9
50°	64.1	77.9	225.7	341.4	646.1	722.9	745.8	775.6	835.2	866.1	876.4
52.5°	59.5	71.1	192.4	303.6	610.6	688.5	714.9	745.8	801.9	831.7	838.6
55°	55.0	65.3	163.8	263.5	574.0	651.9	680.5	710.3	765.3	790.5	795.1
57.5°	52.7	60.7	139.7	225.7	535.0	610.6	642.7	670.2	721.7	741.2	745.8
60°	49.3	57.3	121.5	193.6	492.7	571.7	599.2	626.7	670.2	686.2	689.7
62.5°	45.9	55.0	107.7	162.7	449.1	525.9	553.3	578.6	615.2	626.7	631.3
65°	43.6	52.7	97.4	139.7	404.4	477.7	505.2	527.0	556.8	568.3	570.6
67.5°	41.3	50.4	89.3	120.3	359.8	429.6	450.2	470.9	493.8	505.2	506.3
70°	37.8	48.1	82.5	106.5	313.9	374.6	391.8	413.6	431.9	437.7	441.1
72.5°	35.5	44.7	77.9	96.3	266.9	321.9	338.0	350.5	366.6	372.3	372.3
75°	32.1	40.1	73.3	85.9	218.8	263.5	277.2	289.8	302.4	304.8	301.3
77.5°	28.6	35.5	63.0	72.2	170.7	208.5	219.9	226.9	237.1	239.4	240.6
80°	24.1	30.9	49.3	56.1	123.8	153.5	161.5	167.2	176.5	176.5	178.7
82.5°	18.4	24.1	35.5	40.1	83.6	105.4	112.2	115.7	121.5	121.5	121.5
85°	11.4	14.9	22.9	26.3	50.4	64.1	68.8	69.9	74.5	75.6	75.6
87.5°	5.7	8.0	14.9	16.1	26.3	33.2	33.2	35.5	35.5	34.3	33.2
90°	5.3	9.6	13.8	14.9	23.3	34.6	40.2	35.8	26.8	20.2	20.2
92.5°	21.2	57.2	93.3	102.2	143.7	199.0	226.7	198.7	142.6	100.6	96.6
95°	50.8	116.8	182.6	199.1	353.5	559.5	662.5	591.1	448.5	341.6	329.4
97.5°	87.9	146.1	204.2	218.7	476.3	819.6	991.3	946.2	856.1	788.5	765.5
100°	116.5	169.2	222.0	235.1	520.9	902.0	1092.4	1095.8	1102.3	1107.3	1079.8
102.5°	140.8	190.0	239.2	251.5	541.3	927.8	1121.0	1178.4	1293.3	1379.5	1355.9
105°	182.2	223.9	265.5	275.9	556.5	930.7	1117.9	1246.6	1504.0	1697.2	1684.5
107.5°	224.6	263.4	302.2	311.9	559.4	889.3	1054.3	1233.9	1593.0	1862.4	1865.5
110°	253.2	288.2	323.2	332.0	555.1	852.6	1001.4	1202.1	1603.6	1904.8	1917.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	281.2	314.6	348.0	356.3	555.3	820.6	953.2	1158.7	1569.6	1877.8	1898.0
115°	323.5	354.4	385.2	392.9	560.4	783.7	895.5	1093.4	1489.3	1786.2	1814.3
117.5°	365.4	393.4	421.4	428.4	570.9	760.8	855.8	1034.3	1391.6	1659.6	1690.7
120°	389.7	416.0	442.4	449.0	579.3	753.0	839.9	1003.1	1329.5	1574.3	1604.6
122.5°	413.6	440.2	466.8	473.4	591.5	748.9	827.7	974.6	1268.6	1489.1	1518.9
125°	450.1	474.4	498.6	504.6	607.9	745.6	814.4	939.3	1188.9	1376.3	1403.8
127.5°	479.8	504.3	528.7	534.9	624.4	743.7	803.3	910.5	1124.9	1285.7	1308.9
130°	495.7	522.0	548.4	554.9	636.3	744.9	799.1	894.5	1085.4	1228.6	1250.0
132.5°	512.0	538.4	564.8	571.4	646.1	745.6	795.4	880.8	1051.7	1179.8	1199.0
135°	536.4	560.4	584.5	590.5	656.7	744.9	789.0	860.6	1003.7	1111.0	1127.5
137.5°	561.3	585.1	608.8	614.8	672.5	749.5	787.9	848.4	969.4	1060.1	1073.6
140°	582.0	603.9	625.7	631.2	682.2	750.3	784.3	836.5	941.0	1019.4	1032.0
142.5°	597.9	618.1	638.4	643.4	690.4	753.0	784.3	830.1	921.9	990.8	1001.6
145°	622.2	639.9	657.5	661.9	701.0	753.0	779.0	816.5	891.6	947.9	956.1
147.5°	646.6	663.7	681.0	685.3	716.5	758.1	779.0	808.5	867.5	911.9	918.7
150°	662.5	678.0	693.6	697.4	724.6	760.9	779.0	803.9	853.8	891.2	896.7
152.5°	678.9	690.6	702.4	705.3	729.9	762.6	779.0	800.2	842.9	874.8	879.0
155°	703.2	711.9	720.6	722.8	741.6	766.5	779.0	795.9	829.8	855.2	858.0
157.5°	721.2	729.7	738.1	740.3	753.2	770.3	779.0	792.1	818.5	838.2	840.2
160°	733.4	740.0	746.6	748.2	758.5	772.1	779.0	790.2	812.9	829.8	830.9
162.5°	745.6	750.5	755.5	756.8	764.2	774.0	779.0	788.5	807.6	821.8	822.9
165°	758.8	763.2	767.8	768.9	772.2	776.7	779.0	785.8	799.5	809.7	810.8
167.5°	771.0	773.2	775.3	775.8	778.6	782.4	784.3	788.7	797.7	804.4	804.8
170°	779.0	781.1	783.2	783.7	783.9	784.2	784.3	788.7	797.7	804.4	804.4
172.5°	783.2	783.7	784.2	784.3	784.3	784.3	784.3	787.8	794.9	800.1	799.7
175°	789.0	789.0	789.0	789.0	787.4	785.3	784.3	786.5	791.0	794.3	794.3
177.5°	789.0	789.0	789.0	789.0	787.8	786.1	785.3	787.1	790.6	793.2	792.8
180°	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0	789.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	356.3	356.3
2.5°	380.3	378.0
5°	489.2	491.5
7.5°	658.7	657.6
10°	819.1	829.4
12.5°	936.0	938.3
15°	1007.0	1011.6
17.5°	1034.5	1035.6
20°	1035.6	1033.3
22.5°	1023.1	1020.8
25°	1008.1	1007.0
27.5°	994.4	995.6
30°	988.7	992.2
32.5°	988.7	994.4
35°	991.0	996.7
37.5°	989.8	996.7
40°	985.2	993.3
42.5°	972.7	978.4
45°	953.2	960.0
47.5°	927.9	932.5
50°	895.9	900.5
52.5°	855.8	856.9
55°	807.7	812.3
57.5°	756.2	757.3
60°	698.8	702.3
62.5°	638.1	638.1
65°	574.0	576.3
67.5°	507.5	513.2
70°	440.0	441.1
72.5°	373.5	373.5
75°	304.8	305.9
77.5°	239.4	239.4
80°	177.6	178.7
82.5°	122.6	124.9
85°	76.8	76.8
87.5°	35.5	32.1
90°	20.2	20.2
92.5°	80.6	64.6
95°	281.0	232.5
97.5°	673.1	580.9
100°	969.9	860.0
102.5°	1261.8	1167.7
105°	1633.9	1583.3
107.5°	1877.7	1889.9
110°	1970.7	2023.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1978.9	2059.9
115°	1926.5	2038.7
117.5°	1815.2	1939.7
120°	1725.6	1846.5
122.5°	1638.2	1757.5
125°	1513.7	1623.6
127.5°	1401.6	1494.4
130°	1335.6	1421.3
132.5°	1275.7	1352.4
135°	1193.6	1259.8
137.5°	1127.8	1181.9
140°	1082.7	1133.3
142.5°	1045.2	1088.8
145°	989.1	1022.0
147.5°	945.9	973.3
150°	918.9	941.0
152.5°	895.6	912.4
155°	869.1	880.1
157.5°	848.0	855.8
160°	835.4	839.9
162.5°	827.1	831.4
165°	815.3	819.7
167.5°	806.7	808.6
170°	804.4	804.4
172.5°	798.1	796.5
175°	794.3	794.3
177.5°	790.9	789.0
180°	789.0	789.0



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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	1.20	1.96	2.27	3.04	4.51	14.38	15.15	15.45	16.22	17.69
	3H	1.90	2.58	2.97	3.67	5.15	16.21	16.90	17.29	17.98	19.47
	4H	2.19	2.84	3.28	3.93	5.42	16.85	17.51	17.94	18.59	20.08
	6H	2.44	3.04	3.53	4.13	5.63	17.28	17.88	18.38	18.97	20.47
	8H	2.50	3.07	3.60	4.18	5.68	17.40	17.97	18.50	19.07	20.57
	12H	2.52	3.06	3.62	4.16	5.68	17.46	18.00	18.57	19.10	20.62
4H	2H	8.40	9.06	9.50	10.14	11.63	14.64	15.29	15.74	16.38	17.87
	3H	9.96	10.51	11.07	11.62	13.12	16.68	17.22	17.78	18.34	19.84
	4H	10.05	10.55	11.16	11.66	13.18	17.44	17.94	18.55	19.04	20.57
	6H	10.06	10.49	11.17	11.61	13.13	17.97	18.41	19.09	19.53	21.05
	8H	10.03	10.43	11.15	11.55	13.09	18.13	18.54	19.25	19.65	21.19
	12H	9.98	10.35	11.12	11.48	13.02	18.22	18.59	19.36	19.72	21.26
8H	4H	11.49	11.89	12.61	13.01	14.54	17.49	17.90	18.61	19.01	20.55
	6H	11.73	12.06	12.87	13.22	14.75	18.12	18.45	19.26	19.61	21.14
	8H	11.74	12.04	12.89	13.17	14.73	18.34	18.63	19.48	19.77	21.32
	12H	11.71	11.96	12.86	13.10	14.69	18.48	18.73	19.63	19.87	21.46
12H	4H	11.63	11.99	12.76	13.12	14.66	17.44	17.81	18.58	18.94	20.48
	6H	11.98	12.28	13.13	13.42	14.97	18.10	18.39	19.24	19.53	21.08
	8H	12.05	12.31	13.20	13.44	15.03	18.33	18.58	19.47	19.72	21.30