

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: P937045

Luminaire Tested: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937045
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-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

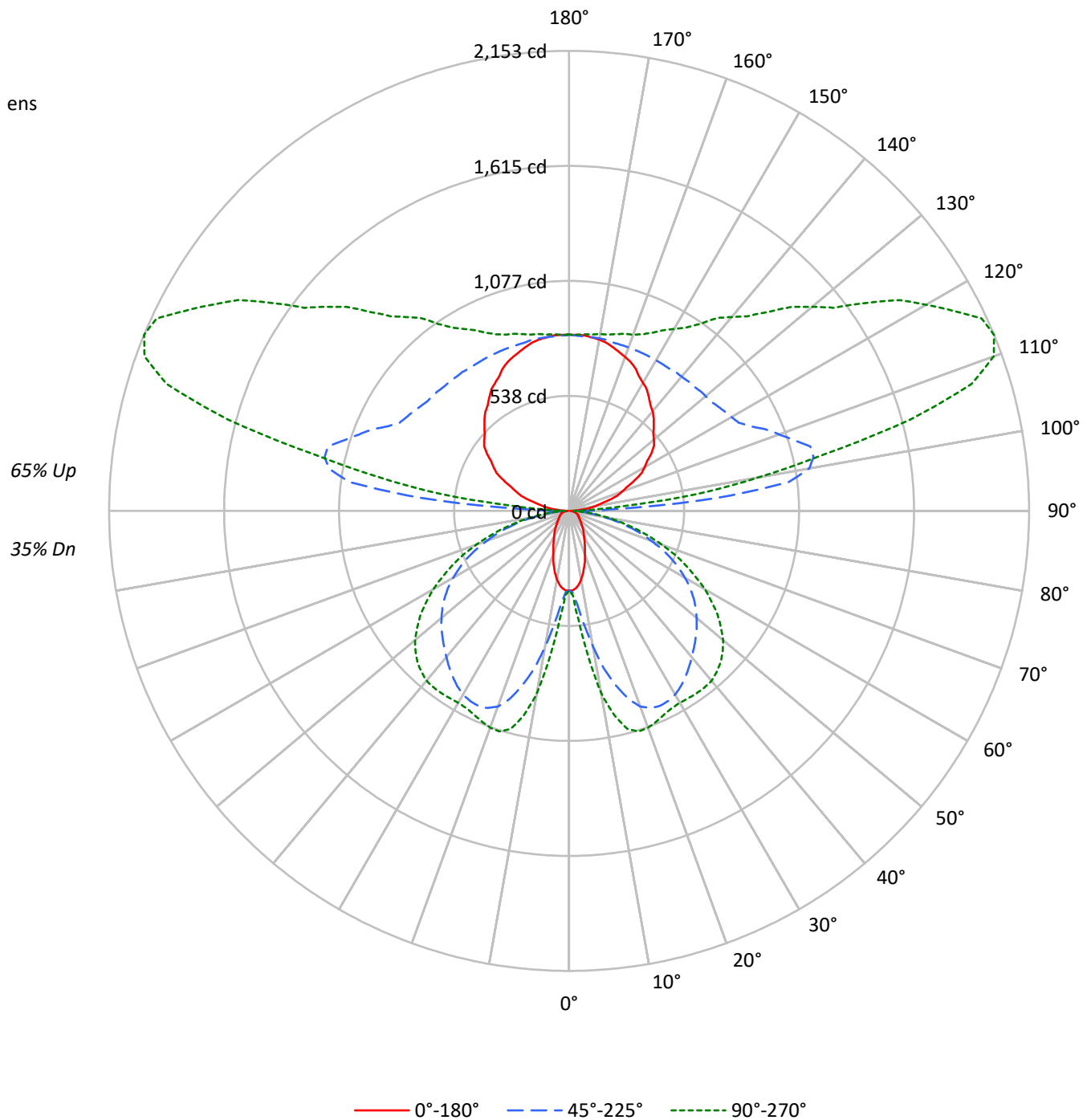
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8229.1 lumens
Efficiency: N/A
Efficacy: 119.6 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_{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

TEST NUMBER: P937045
CATALOG NUMBER: SQ4-FB-075U-050D-92765-1D-UNV-STD-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		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°	1727	1727	1727
5°	1688	1997	2322
10°	1531	2911	3850
15°	1301	3803	4649
20°	1059	4407	4737
25°	884	4611	4641
30°	745	4640	4633
35°	659	4563	4752
40°	574	4463	4876
45°	520	4390	4895
50°	477	4324	4814
55°	457	4227	4601
60°	468	4042	4264
65°	486	3759	3801
70°	518	3278	3211
75°	575	2673	2505
80°	629	1854	1688
85°	559	984	864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4895 cd/sqm



TEST NUMBER: P937045

CATALOG NUMBER: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	0.6
10°-20°	213.5	2.6
20°-30°	373.4	4.5
30°-40°	480.7	5.8
40°-50°	536.9	6.5
50°-60°	514.2	6.2
60°-70°	407.5	5.0
70°-80°	239.6	2.9
80°-90°	69.7	0.8
90°-100°	402.0	4.9
100°-110°	1056.7	12.8
110°-120°	1095.7	13.3
120°-130°	878.9	10.7
130°-140°	689.6	8.4
140°-150°	529.3	6.4
150°-160°	381.2	4.6
160°-170°	233.2	2.8
170°-180°	78.8	1.0
0°-30°	635.0	7.7
0°-40°	1115.7	13.6
0°-60°	2166.8	26.3
0°-90°	2883.6	35.0
90°-120°	2554.4	31.0
90°-150°	4652.2	56.5
90°-180°	5345.0	65.0
0°-180°	8229.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	363	389	438	496	514	33
15°	272	502	845	1025	1057	76
25°	174	569	1007	1051	1052	80
35°	117	544	948	1002	1042	73
45°	80	433	838	960	1003	62
55°	58	275	711	826	849	52
65°	46	146	528	594	602	45
75°	34	90	290	318	320	35
85°	12	28	72	79	80	13
90°	6	16	42	21	21	5
95°	53	208	692	357	243	59
105°	190	288	1168	1774	1655	202
115°	338	411	936	1867	2131	334
125°	470	527	851	1438	1697	418
135°	561	617	825	1161	1316	434
145°	650	692	814	991	1068	407
155°	735	755	814	894	920	338
165°	793	804	814	846	857	224
175°	825	825	820	830	830	78
180°	825	825	825	825	825	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3
2.5°	372.3	372.3	374.7	376.0	378.3	379.5	382.0	384.4	391.5	392.7	395.1
5°	362.8	367.6	383.1	389.1	405.9	428.6	438.2	453.7	486.1	495.7	501.7
7.5°	348.4	359.2	397.5	407.0	449.0	508.8	534.0	567.5	618.9	644.1	664.5
10°	325.6	348.4	416.7	439.4	507.6	598.6	645.4	692.0	769.8	804.5	817.7
12.5°	300.5	337.6	437.0	468.1	566.3	699.2	755.5	806.9	895.6	942.2	949.4
15°	271.8	322.1	456.1	501.7	628.6	783.0	845.3	908.7	991.3	1024.8	1033.2
17.5°	246.6	310.1	474.2	522.0	676.4	858.4	921.9	974.6	1041.6	1064.4	1070.3
20°	215.5	290.9	486.1	548.3	726.8	913.5	974.6	1015.3	1060.8	1075.2	1077.6
22.5°	192.7	270.6	493.3	557.9	760.2	947.1	998.5	1030.9	1062.0	1066.8	1067.9
25°	173.6	247.8	492.1	568.7	789.0	967.4	1006.9	1030.9	1048.8	1051.2	1051.2
27.5°	155.7	222.7	487.3	571.1	810.6	972.2	1003.3	1020.1	1028.5	1033.2	1033.2
30°	140.1	198.8	475.3	566.3	820.1	967.4	992.5	1000.9	1009.3	1016.5	1020.1
32.5°	128.1	176.0	457.4	556.7	821.3	955.4	973.4	978.1	990.1	1006.9	1012.9
35°	117.3	153.3	437.0	543.5	814.2	936.3	948.2	953.1	977.0	1002.1	1010.4
37.5°	106.6	136.5	410.7	520.8	803.4	913.5	921.9	930.3	967.4	997.3	1006.9
40°	95.8	122.1	379.5	495.7	786.6	886.0	893.2	906.4	955.4	990.1	999.7
42.5°	87.4	110.1	346.0	469.3	765.1	854.9	865.7	884.8	941.1	978.1	988.9
45°	80.2	98.2	310.1	433.4	737.5	822.5	838.1	864.4	924.3	960.2	969.7
47.5°	73.0	89.8	273.0	396.3	707.6	790.2	810.6	840.5	901.5	936.3	944.7
50°	67.0	81.4	235.8	356.8	675.3	755.5	779.4	810.6	872.8	905.1	915.9
52.5°	62.2	74.3	201.1	317.2	638.1	719.5	747.1	779.4	838.1	869.2	876.4
55°	57.5	68.3	171.2	275.4	599.8	681.2	711.2	742.3	799.8	826.1	830.9
57.5°	55.1	63.5	146.0	235.8	559.1	638.1	671.7	700.4	754.3	774.6	779.4
60°	51.5	59.9	126.9	202.4	514.9	597.4	626.2	654.9	700.4	717.1	720.8
62.5°	47.9	57.5	112.6	170.0	469.3	549.6	578.2	604.7	643.0	654.9	659.7
65°	45.5	55.1	101.8	146.0	422.7	499.2	528.0	550.7	581.9	593.9	596.3
67.5°	43.1	52.7	93.4	125.7	376.0	449.0	470.5	492.1	516.0	528.0	529.1
70°	39.5	50.3	86.2	111.3	328.0	391.5	409.4	432.2	451.4	457.4	460.9
72.5°	37.1	46.7	81.4	100.6	278.9	336.4	353.2	366.3	383.1	389.1	389.1
75°	33.6	41.9	76.6	89.8	228.7	275.4	289.7	302.9	316.1	318.5	314.9
77.5°	29.9	37.1	65.9	75.4	178.4	217.9	229.8	237.1	247.8	250.2	251.5
80°	25.2	32.3	51.5	58.6	129.3	160.4	168.8	174.8	184.4	184.4	186.7
82.5°	19.2	25.2	37.1	41.9	87.4	110.1	117.3	121.0	126.9	126.9	126.9
85°	12.0	15.5	23.9	27.5	52.7	67.0	71.9	73.0	77.8	79.0	79.0
87.5°	6.0	8.4	15.5	16.8	27.5	34.7	34.7	37.1	37.1	35.9	34.7
90°	5.5	10.0	14.5	15.5	24.4	36.2	42.0	37.4	28.0	21.1	21.1
92.5°	22.1	59.8	97.5	106.8	150.2	208.0	236.9	207.6	149.1	105.2	101.0
95°	53.1	122.0	190.8	208.1	369.5	584.7	692.3	617.8	468.7	357.0	344.3
97.5°	91.9	152.6	213.4	228.6	497.7	856.6	1036.0	988.8	894.7	824.1	800.0
100°	121.8	176.8	232.0	245.7	544.4	942.6	1141.7	1145.1	1152.0	1157.2	1128.5
102.5°	147.2	198.6	250.0	262.9	565.7	969.7	1171.6	1231.5	1351.6	1441.7	1417.0
105°	190.4	234.0	277.4	288.3	581.6	972.7	1168.3	1302.8	1571.8	1773.6	1760.4
107.5°	234.7	275.3	315.8	326.0	584.6	929.4	1101.9	1289.5	1664.8	1946.4	1949.6
110°	264.6	301.2	337.8	347.0	580.1	891.0	1046.5	1256.3	1675.9	1990.6	2004.4



TEST NUMBER: P937045

CATALOG NUMBER: SQ4-FB-075U-050D-92765-1D-UNV-STD-W-8-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	293.9	328.8	363.7	372.4	580.3	857.5	996.2	1210.9	1640.4	1962.4	1983.6
115°	338.1	370.3	402.6	410.6	585.6	819.1	935.8	1142.6	1556.4	1866.6	1896.0
117.5°	381.9	411.1	440.4	447.7	596.6	795.1	894.3	1081.0	1454.3	1734.4	1766.9
120°	407.3	434.8	462.4	469.3	605.4	786.9	877.7	1048.3	1389.5	1645.3	1676.9
122.5°	432.2	460.1	487.8	494.8	618.1	782.6	864.9	1018.6	1325.8	1556.2	1587.3
125°	470.4	495.8	521.0	527.4	635.3	779.2	851.1	981.6	1242.5	1438.3	1467.0
127.5°	501.4	527.0	552.5	559.0	652.5	777.2	839.5	951.5	1175.6	1343.7	1367.9
130°	518.0	545.5	573.1	579.9	665.0	778.5	835.1	934.8	1134.3	1283.9	1306.3
132.5°	535.1	562.7	590.3	597.2	675.2	779.2	831.2	920.5	1099.1	1233.0	1253.1
135°	560.6	585.6	610.8	617.1	686.2	778.5	824.6	899.4	1048.9	1161.0	1178.3
137.5°	586.6	611.4	636.3	642.5	702.8	783.3	823.4	886.6	1013.1	1107.9	1122.0
140°	608.2	631.1	653.9	659.6	712.9	784.1	819.6	874.2	983.4	1065.3	1078.6
142.5°	624.8	646.0	667.1	672.4	721.5	786.9	819.6	867.5	963.5	1035.4	1046.8
145°	650.3	668.8	687.1	691.8	732.6	786.9	814.1	853.3	931.8	990.6	999.2
147.5°	675.7	693.7	711.7	716.1	748.8	792.3	814.1	845.0	906.6	953.0	960.1
150°	692.3	708.6	724.8	728.8	757.2	795.1	814.1	840.1	892.3	931.4	937.2
152.5°	709.5	721.8	734.1	737.1	762.7	796.9	814.1	836.3	880.8	914.2	918.6
155°	734.9	744.0	753.1	755.4	775.0	801.0	814.1	831.7	867.2	893.8	896.6
157.5°	753.7	762.6	771.4	773.6	787.1	805.1	814.1	827.8	855.4	876.0	878.1
160°	766.5	773.4	780.2	781.9	792.6	806.9	814.1	825.9	849.5	867.2	868.3
162.5°	779.2	784.3	789.5	790.9	798.6	808.9	814.1	824.1	844.0	858.9	860.0
165°	793.0	797.6	802.4	803.5	807.0	811.7	814.1	821.2	835.5	846.2	847.4
167.5°	805.8	808.0	810.2	810.8	813.7	817.6	819.6	824.2	833.6	840.7	841.1
170°	814.1	816.3	818.5	819.1	819.2	819.5	819.6	824.2	833.6	840.7	840.7
172.5°	818.5	819.0	819.5	819.6	819.6	819.6	819.6	823.3	830.7	836.2	835.8
175°	824.6	824.6	824.6	824.6	822.9	820.7	819.6	821.9	826.7	830.1	830.1
177.5°	824.6	824.6	824.6	824.6	823.3	821.6	820.7	822.5	826.2	829.0	828.5
180°	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6	824.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	372.3	372.3
2.5°	397.5	395.1
5°	511.2	513.6
7.5°	688.4	687.2
10°	856.0	866.8
12.5°	978.1	980.5
15°	1052.4	1057.2
17.5°	1081.1	1082.3
20°	1082.3	1079.9
22.5°	1069.2	1066.8
25°	1053.6	1052.4
27.5°	1039.2	1040.4
30°	1033.2	1036.9
32.5°	1033.2	1039.2
35°	1035.6	1041.6
37.5°	1034.5	1041.6
40°	1029.6	1038.0
42.5°	1016.5	1022.5
45°	996.2	1003.3
47.5°	969.7	974.6
50°	936.3	941.1
52.5°	894.3	895.6
55°	844.1	848.9
57.5°	790.2	791.4
60°	730.3	733.9
62.5°	666.9	666.9
65°	599.8	602.3
67.5°	530.4	536.4
70°	459.8	460.9
72.5°	390.3	390.3
75°	318.5	319.6
77.5°	250.2	250.2
80°	185.6	186.7
82.5°	128.1	130.5
85°	80.2	80.2
87.5°	37.1	33.6
90°	21.1	21.1
92.5°	84.3	67.5
95°	293.7	243.0
97.5°	703.5	607.1
100°	1013.7	898.8
102.5°	1318.7	1220.3
105°	1707.5	1654.6
107.5°	1962.3	1975.1
110°	2059.5	2114.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2068.1	2152.7
115°	2013.3	2130.6
117.5°	1897.0	2027.1
120°	1803.4	1929.8
122.5°	1712.0	1836.7
125°	1581.9	1696.8
127.5°	1464.8	1561.7
130°	1395.8	1485.3
132.5°	1333.2	1413.4
135°	1247.4	1316.5
137.5°	1178.6	1235.2
140°	1131.5	1184.3
142.5°	1092.3	1137.8
145°	1033.7	1068.1
147.5°	988.6	1017.1
150°	960.3	983.4
152.5°	936.0	953.5
155°	908.2	919.8
157.5°	886.2	894.3
160°	873.1	877.7
162.5°	864.4	868.9
165°	852.0	856.6
167.5°	843.1	845.0
170°	840.7	840.7
172.5°	834.1	832.4
175°	830.1	830.1
177.5°	826.6	824.6
180°	824.6	824.6



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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	1.35	2.12	2.42	3.19	4.66	14.53	15.30	15.60	16.37	17.84
	3H	2.05	2.74	3.13	3.82	5.31	16.36	17.05	17.44	18.14	19.62
	4H	2.34	3.00	3.43	4.08	5.57	17.01	17.66	18.09	18.74	20.23
	6H	2.59	3.19	3.69	4.28	5.78	17.43	18.03	18.53	19.12	20.62
	8H	2.66	3.23	3.76	4.33	5.83	17.55	18.12	18.65	19.23	20.72
	12H	2.67	3.21	3.78	4.31	5.83	17.61	18.16	18.72	19.26	20.78
4H	2H	8.56	9.21	9.65	10.30	11.79	14.79	15.45	15.89	16.53	18.02
	3H	10.12	10.66	11.22	11.77	13.28	16.83	17.38	17.94	18.49	19.99
	4H	10.21	10.71	11.31	11.81	13.33	17.59	18.10	18.70	19.20	20.72
	6H	10.21	10.64	11.33	11.77	13.28	18.13	18.56	19.24	19.68	21.20
	8H	10.19	10.59	11.30	11.71	13.24	18.29	18.69	19.40	19.81	21.34
	12H	10.14	10.50	11.27	11.63	13.17	18.38	18.74	19.51	19.87	21.41
8H	4H	11.64	12.05	12.76	13.16	14.70	17.65	18.05	18.76	19.17	20.70
	6H	11.88	12.21	13.02	13.37	14.90	18.27	18.60	19.41	19.76	21.29
	8H	11.90	12.19	13.04	13.33	14.88	18.49	18.78	19.63	19.92	21.47
	12H	11.86	12.12	13.01	13.25	14.84	18.63	18.89	19.78	20.02	21.61
12H	4H	11.78	12.15	12.92	13.28	14.82	17.59	17.96	18.73	19.09	20.63
	6H	12.14	12.43	13.28	13.57	15.12	18.25	18.55	19.40	19.68	21.23
	8H	12.20	12.46	13.35	13.60	15.18	18.48	18.73	19.63	19.87	21.46