

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: P938270

Luminaire Tested: SQ4-FB-150U-050D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

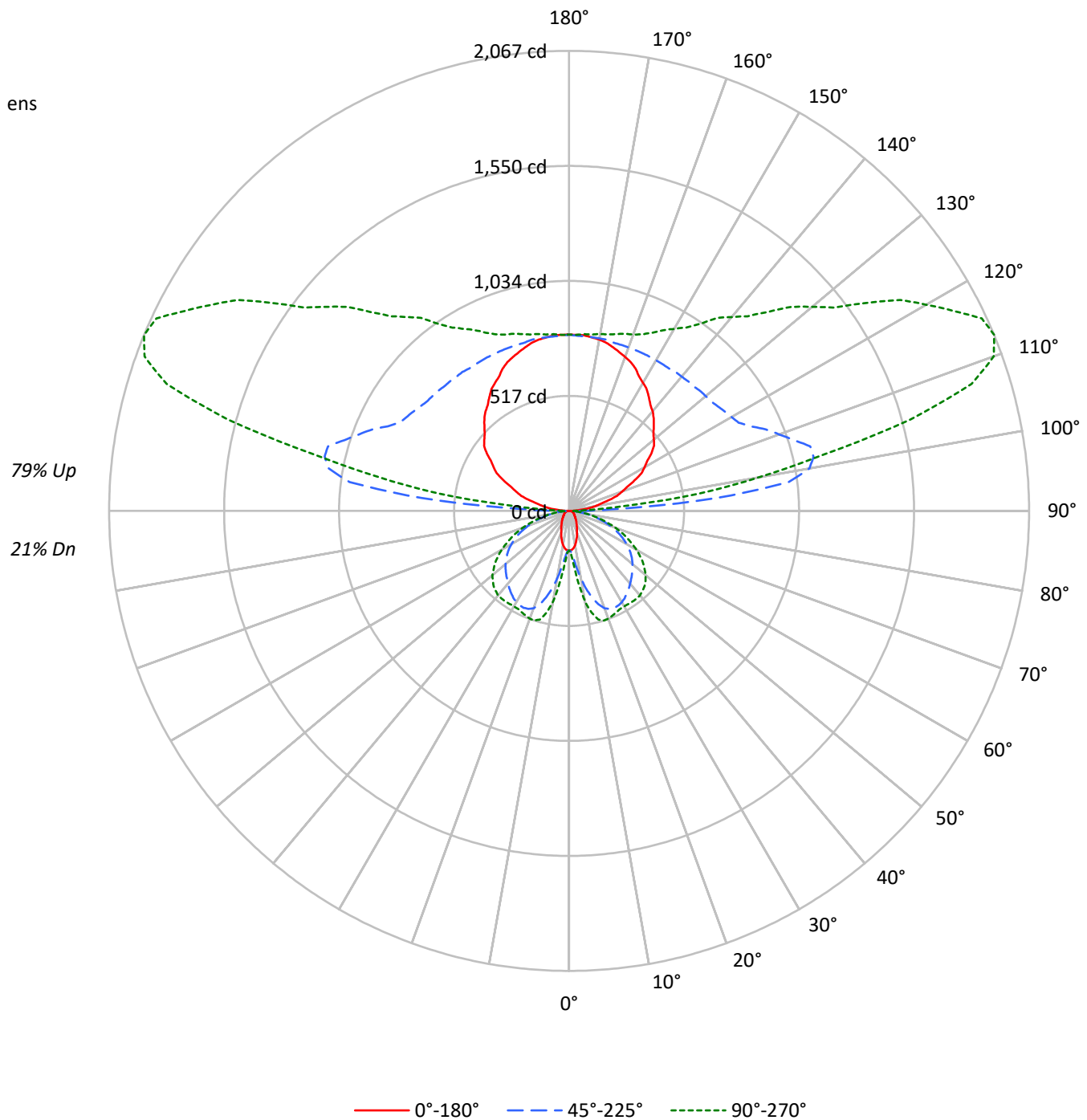
Test Method: LM-79-2019  
Report Number: P938270  
REPORT IS A COMBINATION OF REPORTS P933629 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-050D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6511.0 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 55.6  
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				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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	24	24	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	20	20	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	17	17	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	14	14	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	12	12	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	11	11	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	9	9	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	8	8	8	5
9	45	34	26	21	40	30	24	19	23	18	15	17	13	11	10	9	7	7	7	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	6	6	6	4

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

	0°	45°	90°
0°	1649	1649	1649
5°	1610	1905	2217
10°	1459	2775	3676
15°	1239	3622	4438
20°	1007	4195	4523
25°	839	4387	4431
30°	707	4411	4423
35°	623	4334	4537
40°	543	4236	4655
45°	490	4162	4674
50°	449	4095	4597
55°	428	3999	4392
60°	436	3819	4070
65°	452	3545	3629
70°	477	3085	3066
75°	525	2509	2392
80°	562	1735	1613
85°	472	915	825

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4674 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.0	0.4
10°-20°	101.9	1.6
20°-30°	178.3	2.7
30°-40°	229.5	3.5
40°-50°	256.3	3.9
50°-60°	245.5	3.8
60°-70°	194.5	3.0
70°-80°	114.4	1.8
80°-90°	34.8	0.5
90°-100°	386.0	5.9
100°-110°	1014.7	15.6
110°-120°	1052.2	16.2
120°-130°	843.9	13.0
130°-140°	662.2	10.2
140°-150°	508.3	7.8
150°-160°	366.0	5.6
160°-170°	224.0	3.4
170°-180°	75.7	1.2
0°-30°	303.2	4.7
0°-40°	532.6	8.2
0°-60°	1034.4	15.9
0°-90°	1378.1	21.2
90°-120°	2452.8	37.7
90°-150°	4467.2	68.6
90°-180°	5133.0	78.8
0°-180°	6511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	178	178	178	178	178	
5°	173	186	209	237	245	16
15°	130	240	404	489	505	36
25°	83	272	481	502	502	38
35°	56	260	453	478	497	35
45°	38	207	400	458	479	30
55°	27	132	340	394	405	25
65°	22	70	252	284	288	21
75°	16	43	138	152	153	17
85°	6	13	34	38	38	6
90°	5	15	40	20	20	5
95°	51	200	665	343	233	57
105°	183	277	1122	1703	1589	194
115°	325	394	899	1792	2046	321
125°	452	506	817	1381	1629	401
135°	538	592	792	1115	1264	416
145°	624	664	782	951	1026	391
155°	706	725	782	858	883	324
165°	762	772	782	812	823	215
175°	792	792	787	797	797	75
180°	792	792	792	792	792	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7
2.5°	177.7	177.7	178.9	179.4	180.6	181.2	182.3	183.4	186.9	187.4	188.6
5°	173.2	175.5	182.9	185.7	193.7	204.7	209.2	216.7	232.1	236.6	239.5
7.5°	166.3	171.5	189.7	194.3	214.4	242.9	254.9	270.9	295.5	307.5	317.2
10°	155.5	166.3	198.9	209.8	242.3	285.8	308.1	330.4	367.6	384.1	390.4
12.5°	143.5	161.2	208.7	223.5	270.3	333.8	360.7	385.3	427.5	449.9	453.3
15°	129.8	153.8	217.8	239.5	300.1	373.8	403.5	433.8	473.3	489.2	493.2
17.5°	117.7	148.1	226.4	249.2	322.9	409.8	440.1	465.3	497.2	508.1	510.9
20°	102.9	138.9	232.1	261.8	346.9	436.1	465.3	484.7	506.4	513.2	514.4
22.5°	92.0	129.2	235.5	266.3	363.0	452.1	476.7	492.1	506.9	509.2	509.8
25°	82.9	118.3	234.9	271.5	376.7	461.8	480.7	492.1	500.7	501.8	501.8
27.5°	74.3	106.3	232.6	272.6	387.0	464.1	479.0	487.0	491.0	493.2	493.2
30°	66.9	94.9	226.9	270.3	391.5	461.8	473.8	477.8	481.8	485.3	487.0
32.5°	61.2	84.0	218.4	265.7	392.1	456.1	464.7	467.0	472.7	480.7	483.5
35°	56.0	73.2	208.7	259.5	388.7	447.0	452.7	455.0	466.4	478.4	482.4
37.5°	50.9	65.2	196.0	248.6	383.5	436.1	440.1	444.1	461.8	476.1	480.7
40°	45.8	58.3	181.2	236.6	375.6	422.9	426.4	432.6	456.1	472.7	477.3
42.5°	41.7	52.6	165.2	224.1	365.3	408.1	413.2	422.4	449.3	467.0	472.1
45°	38.3	46.9	148.1	206.9	352.0	392.7	400.1	412.7	441.3	458.4	463.0
47.5°	34.8	42.9	130.4	189.2	337.8	377.3	387.0	401.2	430.4	447.0	451.0
50°	32.0	38.9	112.6	170.3	322.4	360.7	372.1	387.0	416.7	432.1	437.2
52.5°	29.7	35.4	96.0	151.5	304.7	343.5	356.6	372.1	400.1	414.9	418.4
55°	27.4	32.5	81.7	131.5	286.4	325.2	339.5	354.3	381.8	394.4	396.7
57.5°	26.3	30.3	69.7	112.6	266.9	304.7	320.6	334.3	360.1	369.8	372.1
60°	24.5	28.5	60.6	96.6	245.8	285.2	299.0	312.7	334.3	342.3	344.1
62.5°	22.8	27.4	53.8	81.2	224.1	262.3	276.0	288.7	306.9	312.7	314.9
65°	21.7	26.3	48.6	69.7	201.8	238.3	252.0	262.9	277.8	283.5	284.7
67.5°	20.6	25.1	44.6	60.0	179.4	214.4	224.6	234.9	246.3	252.0	252.6
70°	18.8	24.0	41.2	53.2	156.6	186.9	195.4	206.4	215.5	218.4	220.1
72.5°	17.7	22.3	38.9	48.1	133.2	160.6	168.6	174.9	182.9	185.7	185.7
75°	16.0	20.0	36.6	42.9	109.1	131.5	138.3	144.6	150.9	152.0	150.3
77.5°	14.3	17.7	31.4	36.0	85.2	104.0	109.7	113.1	118.3	119.5	120.0
80°	12.0	15.4	24.5	28.0	61.8	76.6	80.6	83.4	88.0	88.0	89.2
82.5°	9.1	12.0	17.7	20.0	41.7	52.6	56.0	57.8	60.6	60.6	60.6
85°	5.7	7.4	11.4	13.1	25.1	32.0	34.3	34.8	37.1	37.7	37.7
87.5°	2.9	4.0	7.4	8.0	13.1	16.6	16.6	17.7	17.7	17.1	16.6
90°	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9	20.2	20.2
92.5°	21.2	57.3	93.5	102.6	144.2	199.6	227.4	199.3	143.1	101.0	97.0
95°	51.0	117.2	183.3	199.8	354.8	561.5	664.8	593.2	450.1	342.8	330.6
97.5°	88.2	146.5	204.9	219.5	477.9	822.5	994.8	949.6	859.1	791.3	768.1
100°	116.9	169.8	222.7	235.9	522.7	905.1	1096.3	1099.6	1106.2	1111.2	1083.6
102.5°	141.3	190.8	240.1	252.4	543.3	931.1	1125.0	1182.6	1297.9	1384.3	1360.7
105°	182.8	224.7	266.4	276.9	558.5	934.0	1121.7	1250.9	1509.3	1703.1	1690.5
107.5°	225.4	264.3	303.3	313.0	561.4	892.5	1058.0	1238.2	1598.6	1868.9	1872.0
110°	254.0	289.2	324.4	333.2	557.1	855.6	1004.8	1206.3	1609.3	1911.5	1924.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.2	315.8	349.3	357.7	557.3	823.5	956.5	1162.7	1575.1	1884.4	1904.6
115°	324.7	355.6	386.6	394.3	562.4	786.6	898.6	1097.2	1494.5	1792.4	1820.6
117.5°	366.7	394.8	422.9	429.9	572.9	763.5	858.7	1038.0	1396.5	1665.4	1696.7
120°	391.1	417.6	444.0	450.6	581.3	755.6	842.8	1006.6	1334.1	1579.9	1610.2
122.5°	415.0	441.7	468.4	475.1	593.6	751.6	830.6	978.1	1273.1	1494.3	1524.2
125°	451.7	476.0	500.4	506.4	610.0	748.2	817.3	942.6	1193.1	1381.1	1408.7
127.5°	481.5	506.0	530.5	536.7	626.5	746.3	806.2	913.8	1128.9	1290.3	1313.5
130°	497.4	523.8	550.2	556.9	638.6	747.5	801.9	897.7	1089.2	1232.8	1254.3
132.5°	513.8	540.3	566.8	573.4	648.3	748.2	798.2	883.9	1055.4	1183.9	1203.2
135°	538.3	562.4	586.4	592.5	658.9	747.5	791.8	863.6	1007.1	1114.8	1131.5
137.5°	563.3	587.1	611.0	616.9	674.9	752.1	790.7	851.4	972.8	1063.9	1077.4
140°	584.0	606.0	628.0	633.5	684.7	752.9	787.0	839.4	944.3	1022.9	1035.6
142.5°	600.0	620.3	640.5	645.6	692.8	755.6	787.0	833.1	925.2	994.3	1005.2
145°	624.4	642.2	659.8	664.2	703.4	755.6	781.7	819.4	894.7	951.2	959.4
147.5°	648.8	666.1	683.3	687.6	719.0	760.8	781.7	811.4	870.6	915.0	921.9
150°	664.8	680.4	695.9	699.8	727.1	763.5	781.7	806.8	856.8	894.3	899.9
152.5°	681.3	693.1	704.9	707.8	732.5	765.3	781.7	803.1	845.9	877.9	882.1
155°	705.7	714.5	723.2	725.4	744.1	769.2	781.7	798.8	832.7	858.2	861.0
157.5°	723.8	732.3	740.7	742.9	755.8	773.1	781.7	794.9	821.3	841.2	843.1
160°	736.0	742.6	749.2	750.9	761.2	774.9	781.7	793.0	815.7	832.7	833.8
162.5°	748.2	753.2	758.1	759.4	766.8	776.8	781.7	791.3	810.4	824.7	825.8
165°	761.5	765.9	770.5	771.6	775.0	779.5	781.7	788.5	802.2	812.5	813.6
167.5°	773.7	775.8	778.0	778.5	781.3	785.1	787.0	791.5	800.5	807.2	807.7
170°	781.7	783.8	786.0	786.5	786.7	786.9	787.0	791.5	800.5	807.2	807.2
172.5°	786.0	786.4	786.9	787.0	787.0	787.0	787.0	790.6	797.6	802.9	802.5
175°	791.8	791.8	791.8	791.8	790.1	788.0	787.0	789.2	793.7	797.1	797.1
177.5°	791.8	791.8	791.8	791.8	790.6	789.0	788.1	789.9	793.4	796.0	795.5
180°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	177.7	177.7
2.5°	189.7	188.6
5°	244.1	245.2
7.5°	328.6	328.1
10°	408.7	413.8
12.5°	467.0	468.1
15°	502.4	504.7
17.5°	516.1	516.7
20°	516.7	515.5
22.5°	510.4	509.2
25°	503.0	502.4
27.5°	496.1	496.7
30°	493.2	495.0
32.5°	493.2	496.1
35°	494.4	497.2
37.5°	493.8	497.2
40°	491.5	495.5
42.5°	485.3	488.1
45°	475.5	479.0
47.5°	463.0	465.3
50°	447.0	449.3
52.5°	426.9	427.5
55°	403.0	405.2
57.5°	377.3	377.8
60°	348.6	350.3
62.5°	318.4	318.4
65°	286.4	287.5
67.5°	253.2	256.0
70°	219.5	220.1
72.5°	186.3	186.3
75°	152.0	152.6
77.5°	119.5	119.5
80°	88.6	89.2
82.5°	61.2	62.3
85°	38.3	38.3
87.5°	17.7	16.0
90°	20.2	20.2
92.5°	80.9	64.8
95°	281.9	233.3
97.5°	675.6	582.9
100°	973.3	863.0
102.5°	1266.2	1171.8
105°	1639.7	1588.9
107.5°	1884.3	1896.6
110°	1977.6	2030.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1985.9	2067.1
115°	1933.3	2045.9
117.5°	1821.6	1946.5
120°	1731.6	1853.0
122.5°	1644.0	1763.7
125°	1518.9	1629.3
127.5°	1406.6	1499.6
130°	1340.3	1426.2
132.5°	1280.1	1357.2
135°	1197.8	1264.2
137.5°	1131.8	1186.1
140°	1086.4	1137.2
142.5°	1048.9	1092.5
145°	992.6	1025.6
147.5°	949.3	976.7
150°	922.1	944.3
152.5°	898.9	915.6
155°	872.1	883.2
157.5°	850.9	858.7
160°	838.3	842.8
162.5°	830.0	834.3
165°	818.1	822.6
167.5°	809.6	811.4
170°	807.2	807.2
172.5°	800.9	799.3
175°	797.1	797.1
177.5°	793.6	791.8
180°	791.8	791.8



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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	0.00	0.00	0.32	0.97	2.60	12.29	12.96	13.46	14.11	15.74
	3H	0.00	0.44	1.02	1.60	3.24	14.10	14.70	15.28	15.86	17.50
	4H	0.13	0.70	1.31	1.86	3.51	14.73	15.29	15.91	16.46	18.10
	6H	0.37	0.89	1.56	2.06	3.72	15.14	15.66	16.33	16.82	18.48
	8H	0.43	0.93	1.63	2.11	3.76	15.24	15.74	16.44	16.92	18.57
	12H	0.44	0.92	1.64	2.09	3.76	15.30	15.77	16.49	16.94	18.62
4H	2H	6.32	6.89	7.51	8.05	9.70	12.55	13.11	13.74	14.27	15.92
	3H	7.87	8.34	9.07	9.53	11.19	14.56	15.03	15.75	16.22	17.88
	4H	7.96	8.39	9.15	9.57	11.25	15.30	15.74	16.50	16.92	18.59
	6H	7.96	8.33	9.16	9.53	11.19	15.82	16.19	17.02	17.39	19.06
	8H	7.93	8.28	9.13	9.47	11.15	15.97	16.32	17.17	17.51	19.19
	12H	7.87	8.19	9.09	9.39	11.08	16.05	16.36	17.26	17.56	19.25
8H	4H	9.38	9.72	10.57	10.91	12.60	15.35	15.70	16.55	16.89	18.57
	6H	9.61	9.90	10.83	11.13	12.81	15.96	16.24	17.17	17.48	19.16
	8H	9.62	9.87	10.85	11.08	12.78	16.17	16.42	17.39	17.62	19.33
	12H	9.58	9.80	10.81	11.01	12.74	16.29	16.51	17.52	17.72	19.45
12H	4H	9.51	9.82	10.72	11.02	12.71	15.29	15.61	16.51	16.81	18.50
	6H	9.86	10.11	11.08	11.32	13.02	15.94	16.19	17.16	17.39	19.10
	8H	9.92	10.14	11.15	11.35	13.08	16.15	16.37	17.38	17.58	19.31