

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: P937561

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937561
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

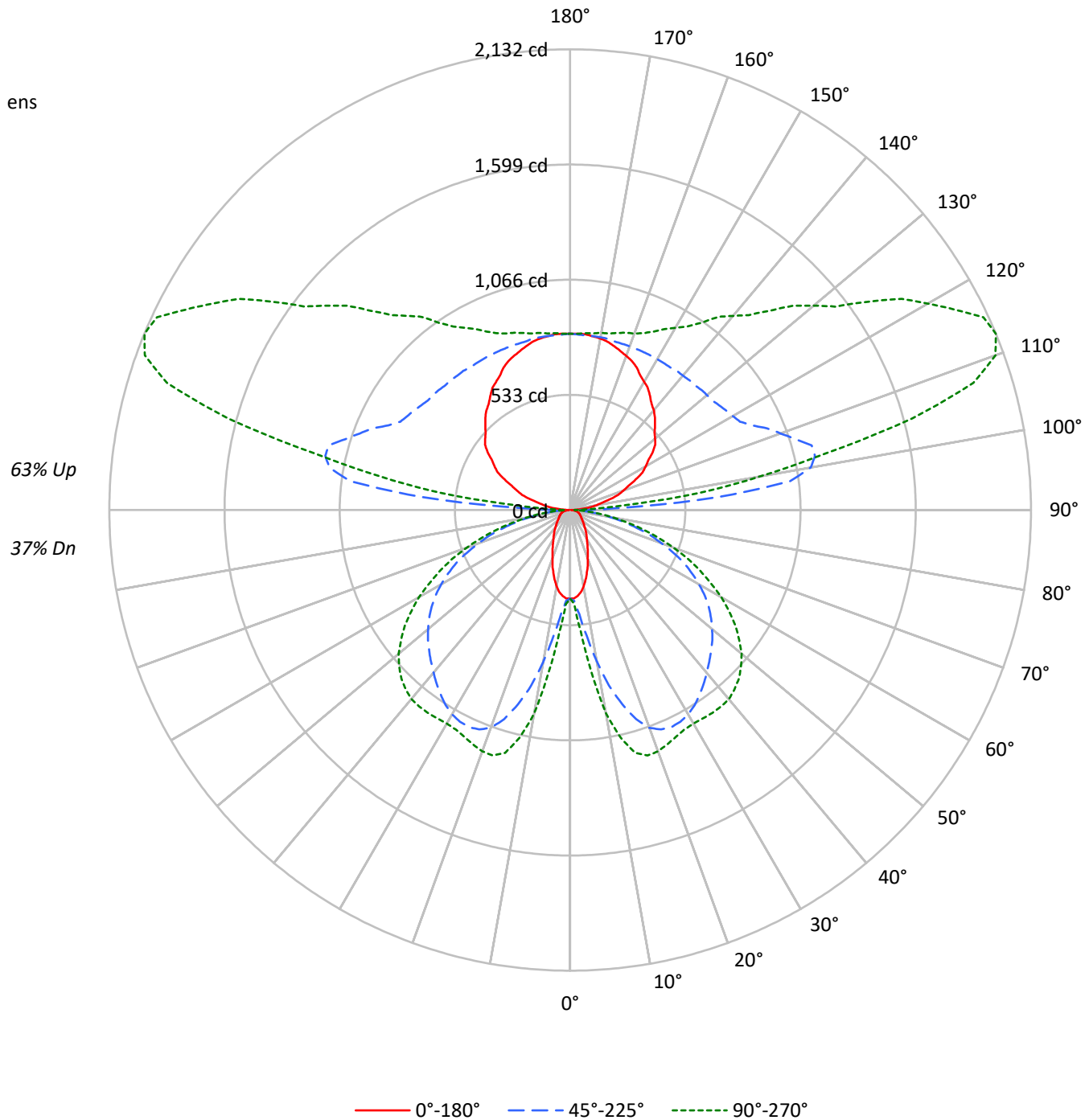
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8465.9 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 73.8
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

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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	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2534	2534	2534
5°	2475	2929	3407
10°	2244	4268	5648
15°	1907	5575	6821
20°	1551	6459	6951
25°	1294	6758	6810
30°	1090	6799	6797
35°	964	6684	6973
40°	839	6535	7154
45°	760	6425	7183
50°	696	6327	7064
55°	666	6183	6750
60°	682	5909	6256
65°	708	5493	5577
70°	752	4788	4711
75°	830	3900	3677
80°	902	2702	2477
85°	787	1430	1268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7183 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	0.6
10°-20°	234.9	2.8
20°-30°	410.9	4.9
30°-40°	528.9	6.2
40°-50°	590.8	7.0
50°-60°	565.8	6.7
60°-70°	448.4	5.3
70°-80°	263.7	3.1
80°-90°	76.4	0.9
90°-100°	398.0	4.7
100°-110°	1046.4	12.4
110°-120°	1085.0	12.8
120°-130°	870.3	10.3
130°-140°	682.9	8.1
140°-150°	524.1	6.2
150°-160°	377.5	4.5
160°-170°	231.0	2.7
170°-180°	78.0	0.9
0°-30°	698.8	8.3
0°-40°	1227.8	14.5
0°-60°	2384.4	28.2
0°-90°	3172.8	37.5
90°-120°	2529.3	29.9
90°-150°	4606.6	54.4
90°-180°	5293.0	62.5
0°-180°	8465.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	399	428	482	545	565	37
15°	299	552	930	1128	1163	83
25°	191	626	1108	1157	1158	88
35°	129	598	1044	1103	1146	81
45°	88	477	922	1057	1104	68
55°	63	303	783	909	934	58
65°	50	161	581	654	663	50
75°	37	99	319	350	352	39
85°	13	30	79	87	88	14
90°	5	15	42	21	21	5
95°	53	206	686	353	241	58
105°	188	286	1157	1756	1638	200
115°	335	407	927	1848	2110	331
125°	466	522	843	1424	1680	414
135°	555	611	816	1150	1304	429
145°	644	685	806	981	1058	403
155°	728	748	806	885	911	334
165°	785	796	806	838	848	222
175°	816	816	812	822	822	78
180°	816	816	816	816	816	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7
2.5°	409.7	409.7	412.4	413.7	416.3	417.6	420.3	422.9	430.8	432.1	434.8
5°	399.2	404.5	421.6	428.2	446.6	471.6	482.2	499.3	534.9	545.4	552.0
7.5°	383.4	395.2	437.4	447.9	494.0	559.9	587.6	624.5	681.1	708.8	731.2
10°	358.3	383.4	458.5	483.5	558.6	658.7	710.1	761.5	847.1	885.3	899.8
12.5°	330.7	371.5	480.9	515.1	623.2	769.4	831.3	888.0	985.5	1036.9	1044.8
15°	299.1	354.4	501.9	552.0	691.7	861.6	930.1	1000.0	1090.9	1127.8	1137.0
17.5°	271.4	341.2	521.7	574.4	744.4	944.6	1014.5	1072.5	1146.3	1171.3	1177.9
20°	237.1	320.1	534.9	603.4	799.7	1005.3	1072.5	1117.3	1167.3	1183.2	1185.8
22.5°	212.1	297.7	542.8	613.9	836.6	1042.2	1098.8	1134.4	1168.7	1173.9	1175.3
25°	191.0	272.7	541.5	625.8	868.2	1064.6	1108.1	1134.4	1154.2	1156.8	1156.8
27.5°	171.3	245.0	536.2	628.4	891.9	1069.9	1104.1	1122.6	1131.8	1137.0	1137.0
30°	154.1	218.7	523.0	623.2	902.5	1064.6	1092.3	1101.5	1110.7	1118.6	1122.6
32.5°	141.0	193.7	503.3	612.6	903.8	1051.4	1071.2	1076.4	1089.6	1108.1	1114.7
35°	129.1	168.6	480.9	598.1	895.9	1030.3	1043.5	1048.8	1075.1	1102.8	1112.0
37.5°	117.3	150.2	451.9	573.1	884.0	1005.3	1014.5	1023.7	1064.6	1097.5	1108.1
40°	105.4	134.4	417.6	545.4	865.6	974.9	982.8	997.3	1051.4	1089.6	1100.2
42.5°	96.2	121.2	380.7	516.4	841.9	940.7	952.5	973.6	1035.6	1076.4	1088.3
45°	88.3	108.0	341.2	476.9	811.6	905.1	922.2	951.2	1017.2	1056.7	1067.2
47.5°	80.4	98.8	300.4	436.1	778.6	869.5	891.9	924.9	992.0	1030.3	1039.6
50°	73.8	89.6	259.5	392.6	743.0	831.3	857.7	891.9	960.4	996.0	1007.9
52.5°	68.5	81.7	221.3	349.1	702.2	791.8	822.1	857.7	922.2	956.5	964.4
55°	63.2	75.1	188.4	303.0	660.0	749.6	782.6	816.8	880.1	909.0	914.3
57.5°	60.6	69.8	160.7	259.5	615.2	702.2	739.1	770.7	830.0	852.4	857.7
60°	56.7	65.9	139.6	222.6	566.5	657.4	689.0	720.6	770.7	789.2	793.1
62.5°	52.7	63.2	123.8	187.1	516.4	604.7	636.3	665.3	707.5	720.6	725.9
65°	50.1	60.6	112.0	160.7	465.1	549.4	581.0	606.0	640.3	653.5	656.1
67.5°	47.4	58.0	102.8	138.3	413.7	494.0	517.8	541.5	567.8	581.0	582.3
70°	43.5	55.3	94.9	122.5	361.0	430.8	450.6	475.6	496.7	503.3	507.2
72.5°	40.8	51.4	89.6	110.7	307.0	370.2	388.6	403.1	421.6	428.2	428.2
75°	36.9	46.1	84.3	98.8	251.6	303.0	318.8	333.3	347.8	350.4	346.5
77.5°	32.9	40.8	72.5	83.0	196.3	239.8	253.0	260.9	272.7	275.3	276.7
80°	27.7	35.6	56.7	64.6	142.3	176.5	185.8	192.3	202.9	202.9	205.5
82.5°	21.1	27.7	40.8	46.1	96.2	121.2	129.1	133.1	139.6	139.6	139.6
85°	13.2	17.1	26.3	30.3	58.0	73.8	79.0	80.4	85.6	87.0	87.0
87.5°	6.6	9.2	17.1	18.4	30.3	38.2	38.2	40.8	40.8	39.5	38.2
90°	5.4	9.8	14.2	15.4	24.2	35.8	41.6	37.0	27.8	20.8	20.8
92.5°	22.0	59.2	96.4	105.7	148.7	205.9	234.5	205.5	147.6	104.1	100.0
95°	52.6	120.8	189.0	206.0	365.9	579.0	685.5	611.7	464.1	353.4	340.9
97.5°	91.0	151.2	211.3	226.3	492.8	848.2	1025.9	979.2	885.9	815.9	792.1
100°	120.6	175.1	229.7	243.3	539.0	933.3	1130.5	1133.9	1140.7	1145.8	1117.4
102.5°	145.8	196.7	247.6	260.3	560.3	960.2	1160.1	1219.5	1338.4	1427.5	1403.2
105°	188.5	231.6	274.7	285.5	576.0	963.2	1156.8	1290.0	1556.4	1756.3	1743.2
107.5°	232.3	272.5	312.8	322.8	578.9	920.3	1091.0	1276.9	1648.5	1927.3	1930.4
110°	261.9	298.2	334.5	343.6	574.5	882.3	1036.2	1243.9	1659.5	1971.1	1984.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	291.0	325.6	360.2	368.8	574.7	849.1	986.3	1199.0	1624.2	1943.2	1964.1
115°	334.8	366.7	398.6	406.6	579.9	811.0	926.6	1131.4	1541.2	1848.4	1877.5
117.5°	378.1	407.1	436.1	443.3	590.7	787.2	885.5	1070.4	1440.1	1717.3	1749.6
120°	403.3	430.6	457.9	464.7	599.5	779.2	869.1	1038.0	1375.8	1629.2	1660.4
122.5°	428.0	455.5	483.1	489.9	612.1	775.0	856.5	1008.6	1312.8	1540.9	1571.8
125°	465.8	490.9	516.0	522.2	629.1	771.6	842.8	972.0	1230.4	1424.3	1452.7
127.5°	496.5	521.8	547.2	553.5	646.1	769.6	831.3	942.2	1164.1	1330.5	1354.5
130°	512.9	540.2	567.5	574.3	658.6	770.8	826.9	925.6	1123.2	1271.3	1293.5
132.5°	529.9	557.2	584.4	591.3	668.6	771.6	823.1	911.5	1088.3	1220.9	1240.8
135°	555.1	579.9	604.8	611.0	679.5	770.8	816.5	890.5	1038.6	1149.7	1166.8
137.5°	580.8	605.4	630.1	636.2	696.0	775.6	815.4	878.0	1003.2	1097.1	1111.1
140°	602.3	624.9	647.6	653.2	706.0	776.3	811.6	865.7	973.8	1054.8	1067.9
142.5°	618.7	639.7	660.6	665.8	714.4	779.1	811.6	859.1	954.0	1025.2	1036.5
145°	643.9	662.2	680.4	685.0	725.4	779.2	806.1	844.9	922.7	980.9	989.4
147.5°	669.1	686.8	704.6	709.1	741.4	784.5	806.1	836.7	897.8	943.6	950.7
150°	685.5	701.6	717.7	721.7	749.8	787.3	806.1	831.9	883.5	922.2	927.9
152.5°	702.6	714.8	726.9	730.0	755.3	789.2	806.1	828.2	872.2	905.3	909.6
155°	727.8	736.7	745.7	748.0	767.4	793.2	806.1	823.7	858.7	885.0	887.9
157.5°	746.4	755.2	763.9	766.1	779.4	797.2	806.1	819.7	847.0	867.5	869.5
160°	758.9	765.8	772.6	774.3	784.9	799.1	806.1	817.8	841.1	858.7	859.9
162.5°	771.6	776.7	781.8	783.1	790.7	801.0	806.1	815.9	835.7	850.5	851.5
165°	785.3	789.9	794.5	795.7	799.2	803.8	806.1	813.1	827.3	837.9	839.0
167.5°	797.8	800.0	802.2	802.8	805.7	809.6	811.6	816.2	825.4	832.4	832.9
170°	806.1	808.3	810.5	811.0	811.2	811.5	811.6	816.2	825.4	832.4	832.4
172.5°	810.5	810.9	811.5	811.6	811.6	811.6	811.6	815.2	822.5	828.0	827.5
175°	816.5	816.5	816.5	816.5	814.8	812.6	811.6	813.8	818.5	822.0	822.0
177.5°	816.5	816.5	816.5	816.5	815.2	813.6	812.7	814.5	818.1	820.9	820.3
180°	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5	816.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	409.7	409.7
2.5°	437.4	434.8
5°	562.6	565.2
7.5°	757.5	756.2
10°	942.0	953.8
12.5°	1076.4	1079.1
15°	1158.1	1163.4
17.5°	1189.7	1191.1
20°	1191.1	1188.4
22.5°	1176.6	1173.9
25°	1159.4	1158.1
27.5°	1143.6	1145.0
30°	1137.0	1141.0
32.5°	1137.0	1143.6
35°	1139.7	1146.3
37.5°	1138.4	1146.3
40°	1133.1	1142.3
42.5°	1118.6	1125.2
45°	1096.2	1104.1
47.5°	1067.2	1072.5
50°	1030.3	1035.6
52.5°	984.1	985.5
55°	928.8	934.1
57.5°	869.5	870.8
60°	803.6	807.6
62.5°	733.8	733.8
65°	660.0	662.7
67.5°	583.6	590.2
70°	505.9	507.2
72.5°	429.5	429.5
75°	350.4	351.8
77.5°	275.3	275.3
80°	204.2	205.5
82.5°	141.0	143.6
85°	88.3	88.3
87.5°	40.8	36.9
90°	20.8	20.8
92.5°	83.4	66.8
95°	290.7	240.6
97.5°	696.6	601.1
100°	1003.6	889.9
102.5°	1305.7	1208.3
105°	1690.8	1638.5
107.5°	1943.2	1955.8
110°	2039.3	2093.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2047.8	2131.6
115°	1993.6	2109.8
117.5°	1878.4	2007.3
120°	1785.7	1910.8
122.5°	1695.3	1818.8
125°	1566.4	1680.1
127.5°	1450.5	1546.4
130°	1382.2	1470.8
132.5°	1320.2	1399.6
135°	1235.2	1303.7
137.5°	1167.1	1223.1
140°	1120.4	1172.7
142.5°	1081.6	1126.7
145°	1023.6	1057.7
147.5°	979.0	1007.2
150°	950.8	973.8
152.5°	926.9	944.2
155°	899.3	910.7
157.5°	877.5	885.5
160°	864.5	869.1
162.5°	855.9	860.3
165°	843.7	848.3
167.5°	834.8	836.8
170°	832.4	832.4
172.5°	825.9	824.2
175°	822.0	822.0
177.5°	818.4	816.5
180°	816.5	816.5



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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	2.96	3.75	4.01	4.81	6.25	16.13	16.92	17.18	17.97	19.41
	3H	3.66	4.37	4.72	5.44	6.89	17.96	18.66	19.02	19.73	21.19
	4H	3.96	4.63	5.03	5.70	7.16	18.60	19.27	19.67	20.34	21.80
	6H	4.20	4.82	5.29	5.90	7.37	19.02	19.64	20.10	20.71	22.18
	8H	4.27	4.86	5.36	5.95	7.42	19.13	19.72	20.22	20.81	22.28
	12H	4.29	4.84	5.38	5.93	7.42	19.20	19.76	20.29	20.84	22.33
4H	2H	10.16	10.83	11.24	11.90	13.36	16.39	17.06	17.47	18.13	19.60
	3H	11.72	12.28	12.81	13.38	14.86	18.43	18.99	19.51	20.09	21.56
	4H	11.81	12.33	12.91	13.42	14.91	19.19	19.70	20.28	20.79	22.29
	6H	11.82	12.26	12.92	13.37	14.86	19.72	20.16	20.82	21.27	22.76
	8H	11.80	12.21	12.90	13.31	14.82	19.88	20.29	20.98	21.39	22.90
	12H	11.75	12.12	12.87	13.24	14.75	19.96	20.34	21.08	21.45	22.96
8H	4H	13.25	13.66	14.35	14.77	16.27	19.24	19.66	20.34	20.76	22.26
	6H	13.49	13.83	14.61	14.98	16.48	19.86	20.21	20.99	21.35	22.85
	8H	13.51	13.81	14.63	14.93	16.45	20.08	20.38	21.21	21.51	23.03
	12H	13.47	13.73	14.60	14.86	16.41	20.22	20.48	21.35	21.60	23.16
12H	4H	13.39	13.76	14.51	14.88	16.39	19.19	19.57	20.31	20.68	22.19
	6H	13.74	14.04	14.87	15.17	16.69	19.85	20.15	20.98	21.27	22.79
	8H	13.81	14.07	14.94	15.20	16.76	20.07	20.33	21.20	21.46	23.01