

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: P937066

Luminaire Tested: SQ4-FB-075U-050D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937066
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-93050-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

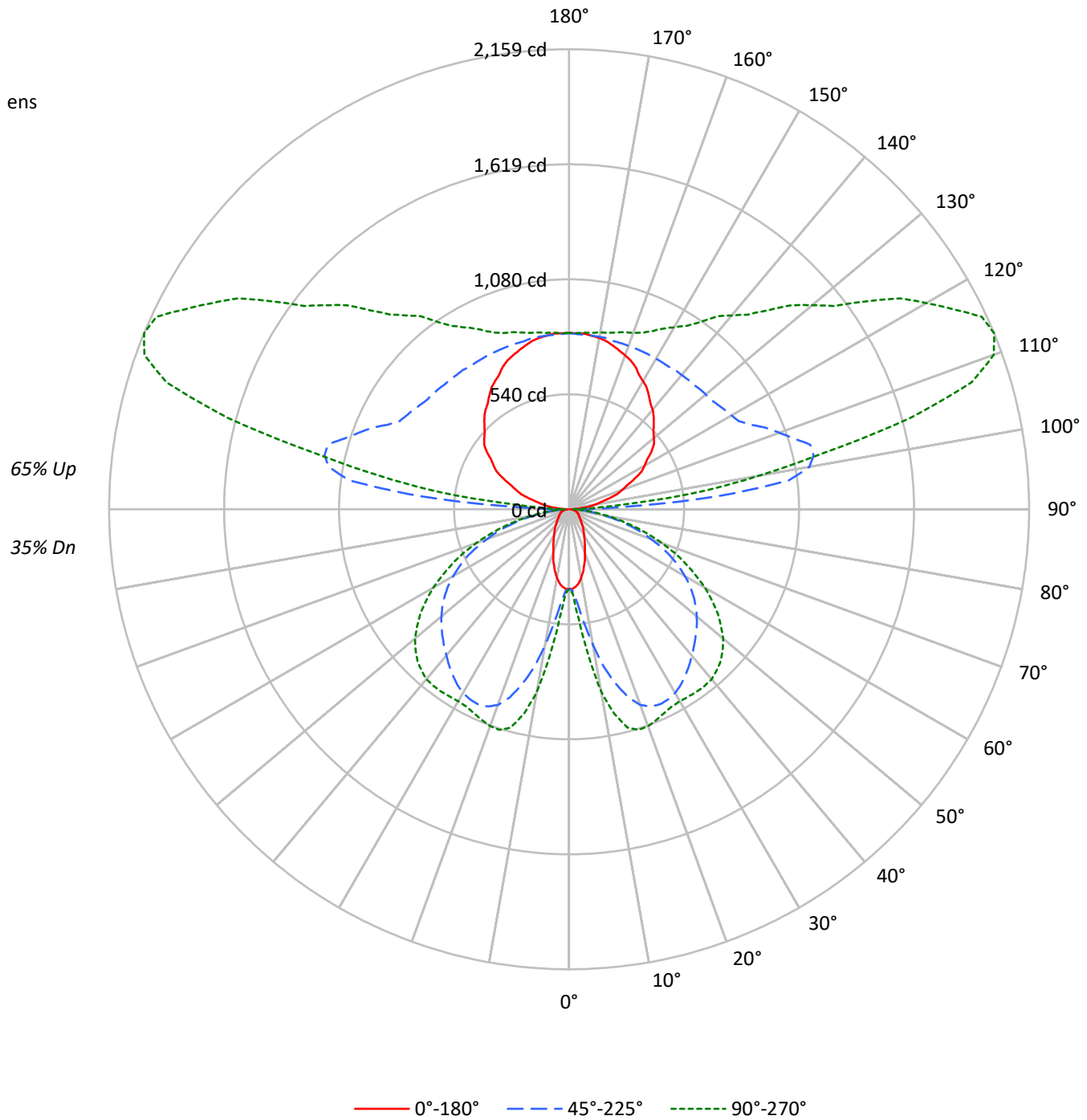
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8253.9 lumens
Efficiency: N/A
Efficacy: 120.0 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: Semi-Indirect

Input Watts (W): 68.8
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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CATALOG NUMBER: SQ4-FB-075U-050D-93050-1D-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	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°	1732	1732	1732
5°	1693	2003	2329
10°	1535	2919	3861
15°	1305	3814	4663
20°	1062	4420	4751
25°	886	4625	4655
30°	747	4654	4647
35°	660	4577	4766
40°	576	4476	4891
45°	522	4403	4910
50°	478	4337	4829
55°	459	4240	4614
60°	470	4054	4276
65°	489	3771	3813
70°	521	3288	3220
75°	577	2681	2513
80°	629	1859	1693
85°	559	987	867

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4910 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	0.6
10°-20°	214.1	2.6
20°-30°	374.5	4.5
30°-40°	482.1	5.8
40°-50°	538.5	6.5
50°-60°	515.8	6.2
60°-70°	408.8	5.0
70°-80°	240.3	2.9
80°-90°	69.9	0.8
90°-100°	403.2	4.9
100°-110°	1059.9	12.8
110°-120°	1099.0	13.3
120°-130°	881.5	10.7
130°-140°	691.7	8.4
140°-150°	530.9	6.4
150°-160°	382.3	4.6
160°-170°	233.9	2.8
170°-180°	79.0	1.0
<hr/>		
0°-30°	636.9	7.7
0°-40°	1119.0	13.6
0°-60°	2173.3	26.3
0°-90°	2892.3	35.0
90°-120°	2562.1	31.0
90°-150°	4666.3	56.5
90°-180°	5362.0	65.0
0°-180°	8253.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	364	390	440	497	515	34
15°	273	503	848	1028	1060	76
25°	174	570	1010	1054	1056	80
35°	118	545	951	1005	1045	73
45°	80	435	841	963	1006	62
55°	58	276	713	829	851	53
65°	46	146	530	596	604	45
75°	34	90	291	319	321	35
85°	12	28	72	79	80	13
90°	6	16	42	21	21	5
95°	53	209	694	358	244	59
105°	191	289	1172	1779	1660	202
115°	339	412	939	1872	2137	335
125°	472	529	854	1443	1702	419
135°	562	619	827	1164	1320	435
145°	652	694	816	994	1071	409
155°	737	758	816	896	922	339
165°	795	806	816	849	859	224
175°	827	827	822	833	833	79
180°	827	827	827	827	827	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	373.4	373.4	375.9	377.1	379.4	380.7	383.1	385.5	392.7	393.8	396.3
5°	363.9	368.7	384.3	390.3	407.1	429.9	439.5	455.1	487.6	497.2	503.2
7.5°	349.4	360.3	398.7	408.3	450.3	510.3	535.6	569.2	620.8	646.1	666.5
10°	326.6	349.4	417.9	440.8	509.2	600.4	647.3	694.1	772.1	806.9	820.2
12.5°	301.5	338.6	438.3	469.5	568.0	701.3	757.8	809.4	898.3	945.1	952.3
15°	272.6	323.0	457.5	503.2	630.5	785.4	847.9	911.4	994.3	1027.9	1036.3
17.5°	247.4	311.0	475.6	523.6	678.5	861.0	924.7	977.5	1044.7	1067.6	1073.6
20°	216.1	291.8	487.6	550.0	729.0	916.3	977.5	1018.3	1064.0	1078.4	1080.8
22.5°	193.3	271.4	494.7	559.6	762.5	949.9	1001.5	1034.0	1065.2	1070.0	1071.2
25°	174.1	248.5	493.6	570.4	791.4	970.3	1009.9	1034.0	1052.0	1054.4	1054.4
27.5°	156.1	223.4	488.8	572.8	813.0	975.1	1006.3	1023.2	1031.6	1036.3	1036.3
30°	140.5	199.4	476.8	568.0	822.6	970.3	995.5	1003.9	1012.3	1019.6	1023.2
32.5°	128.5	176.6	458.8	558.4	823.8	958.3	976.3	981.1	993.1	1009.9	1015.9
35°	117.6	153.7	438.3	545.2	816.6	939.1	951.1	955.9	979.9	1005.2	1013.5
37.5°	106.9	136.9	411.9	522.4	805.8	916.3	924.7	933.1	970.3	1000.3	1009.9
40°	96.1	122.5	380.7	497.2	788.9	888.7	895.8	909.1	958.3	993.1	1002.7
42.5°	87.7	110.5	347.0	470.8	767.4	857.4	868.3	887.4	943.9	981.1	991.9
45°	80.5	98.5	311.0	434.7	739.7	825.0	840.6	867.0	927.1	963.1	972.7
47.5°	73.2	90.1	273.8	397.5	709.7	792.6	813.0	843.0	904.3	939.1	947.5
50°	67.2	81.7	236.5	357.9	677.3	757.8	781.8	813.0	875.4	907.8	918.7
52.5°	62.4	74.5	201.7	318.2	640.1	721.7	749.4	781.8	840.6	871.9	879.0
55°	57.7	68.5	171.7	276.2	601.6	683.3	713.3	744.5	802.2	828.6	833.4
57.5°	55.2	63.7	146.5	236.5	560.8	640.1	673.7	702.6	756.5	777.0	781.8
60°	51.7	60.1	127.3	203.0	516.4	599.2	628.1	656.9	702.6	719.3	723.0
62.5°	48.1	57.7	112.9	170.6	470.8	551.2	580.0	606.5	644.9	656.9	661.7
65°	45.7	55.2	102.1	146.5	423.9	500.7	529.6	552.4	583.7	595.7	598.1
67.5°	43.2	52.8	93.6	126.1	377.1	450.3	471.9	493.6	517.6	529.6	530.7
70°	39.7	50.4	86.5	111.6	329.0	392.7	410.7	433.5	452.8	458.8	462.3
72.5°	37.2	46.8	81.7	100.9	279.8	337.4	354.3	367.4	384.3	390.3	390.3
75°	33.7	42.0	76.8	90.1	229.4	276.2	290.6	303.8	317.0	319.4	315.9
77.5°	30.0	37.2	66.1	75.7	179.0	218.5	230.5	237.8	248.5	251.0	252.2
80°	25.2	32.4	51.7	58.8	129.7	160.9	169.3	175.3	185.0	185.0	187.3
82.5°	19.2	25.2	37.2	42.0	87.7	110.5	117.6	121.3	127.3	127.3	127.3
85°	12.0	15.6	24.0	27.6	52.8	67.2	72.1	73.2	78.1	79.2	79.2
87.5°	6.0	8.4	15.6	16.8	27.6	34.8	34.8	37.2	37.2	36.0	34.8
90°	5.6	10.0	14.5	15.6	24.4	36.3	42.2	37.5	28.1	21.1	21.1
92.5°	22.2	60.0	97.8	107.2	150.7	208.6	237.6	208.2	149.5	105.5	101.3
95°	53.3	122.4	191.4	208.7	370.6	586.4	694.4	619.6	470.1	358.0	345.3
97.5°	92.1	153.1	214.1	229.3	499.2	859.1	1039.1	991.8	897.4	826.6	802.4
100°	122.1	177.4	232.7	246.5	546.1	945.4	1145.1	1148.6	1155.5	1160.7	1131.9
102.5°	147.6	199.2	250.8	263.7	567.4	972.6	1175.1	1235.3	1355.7	1446.0	1421.3
105°	191.0	234.7	278.3	289.2	583.4	975.6	1171.8	1306.7	1576.6	1779.0	1765.7
107.5°	235.4	276.1	316.8	327.0	586.3	932.2	1105.2	1293.4	1669.8	1952.2	1955.5
110°	265.4	302.1	338.8	348.0	581.9	893.7	1049.7	1260.1	1680.9	1996.6	2010.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	294.7	329.7	364.8	373.5	582.0	860.1	999.2	1214.6	1645.3	1968.3	1989.6
115°	339.1	371.5	403.8	411.8	587.4	821.5	938.6	1146.1	1561.1	1872.3	1901.7
117.5°	383.0	412.4	441.7	449.1	598.4	797.5	897.0	1084.2	1458.7	1739.6	1772.2
120°	408.5	436.1	463.8	470.7	607.2	789.3	880.4	1051.5	1393.6	1650.2	1681.9
122.5°	433.5	461.4	489.3	496.3	620.0	785.0	867.6	1021.6	1329.8	1560.9	1592.1
125°	471.8	497.3	522.6	529.0	637.2	781.5	853.7	984.6	1246.3	1442.6	1471.4
127.5°	502.9	528.6	554.2	560.6	654.5	779.5	842.0	954.4	1179.1	1347.7	1372.0
130°	519.5	547.1	574.8	581.7	667.0	780.8	837.7	937.7	1137.8	1287.8	1310.3
132.5°	536.7	564.4	592.1	599.0	677.2	781.5	833.7	923.2	1102.4	1236.7	1256.8
135°	562.3	587.4	612.7	618.9	688.3	780.8	827.1	902.1	1052.1	1164.5	1181.9
137.5°	588.4	613.3	638.2	644.4	705.0	785.6	825.9	889.3	1016.2	1111.3	1125.4
140°	610.1	633.0	655.9	661.6	715.1	786.4	822.1	876.9	986.4	1068.6	1081.8
142.5°	626.7	647.9	669.2	674.4	723.7	789.3	822.1	870.2	966.4	1038.6	1049.9
145°	652.2	670.8	689.2	693.9	734.8	789.3	816.5	855.9	934.6	993.6	1002.2
147.5°	677.8	695.7	713.8	718.3	751.1	794.7	816.5	847.5	909.4	955.8	963.0
150°	694.4	710.7	727.0	731.0	759.5	797.5	816.5	842.7	895.0	934.2	940.0
152.5°	711.6	723.9	736.3	739.3	765.0	799.3	816.5	838.8	883.5	917.0	921.4
155°	737.1	746.2	755.4	757.7	777.3	803.5	816.5	834.3	869.8	896.5	899.3
157.5°	756.0	764.9	773.7	776.0	789.5	807.5	816.5	830.3	858.0	878.7	880.7
160°	768.8	775.7	782.6	784.3	795.0	809.4	816.5	828.3	852.1	869.8	871.0
162.5°	781.5	786.7	791.9	793.2	801.0	811.3	816.5	826.6	846.5	861.5	862.5
165°	795.4	800.1	804.8	806.0	809.5	814.2	816.5	823.7	838.0	848.8	849.9
167.5°	808.2	810.4	812.7	813.2	816.2	820.1	822.1	826.7	836.1	843.2	843.7
170°	816.5	818.8	821.0	821.5	821.7	822.0	822.1	826.7	836.1	843.2	843.2
172.5°	821.0	821.4	822.0	822.1	822.1	822.1	822.1	825.7	833.2	838.7	838.3
175°	827.1	827.1	827.1	827.1	825.4	823.1	822.1	824.4	829.1	832.6	832.6
177.5°	827.1	827.1	827.1	827.1	825.7	824.0	823.1	825.0	828.7	831.5	831.0
180°	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1	827.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	373.4	373.4
2.5°	398.7	396.3
5°	512.7	515.2
7.5°	690.5	689.3
10°	858.6	869.4
12.5°	981.1	983.5
15°	1055.6	1060.4
17.5°	1084.4	1085.6
20°	1085.6	1083.1
22.5°	1072.4	1070.0
25°	1056.7	1055.6
27.5°	1042.3	1043.6
30°	1036.3	1040.0
32.5°	1036.3	1042.3
35°	1038.7	1044.7
37.5°	1037.6	1044.7
40°	1032.7	1041.2
42.5°	1019.6	1025.6
45°	999.2	1006.3
47.5°	972.7	977.5
50°	939.1	943.9
52.5°	897.0	898.3
55°	846.6	851.4
57.5°	792.6	793.8
60°	732.5	736.1
62.5°	668.9	668.9
65°	601.6	604.1
67.5°	532.0	538.0
70°	461.2	462.3
72.5°	391.5	391.5
75°	319.4	320.6
77.5°	251.0	251.0
80°	186.1	187.3
82.5°	128.5	130.9
85°	80.5	80.5
87.5°	37.2	33.7
90°	21.1	21.1
92.5°	84.5	67.7
95°	294.6	243.7
97.5°	705.6	608.9
100°	1016.7	901.5
102.5°	1322.6	1224.0
105°	1712.6	1659.6
107.5°	1968.3	1981.1
110°	2065.8	2121.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2074.3	2159.2
115°	2019.4	2137.0
117.5°	1902.7	2033.3
120°	1808.8	1935.6
122.5°	1717.2	1842.3
125°	1586.7	1701.9
127.5°	1469.2	1566.4
130°	1400.0	1489.8
132.5°	1337.2	1417.6
135°	1251.2	1320.5
137.5°	1182.2	1238.9
140°	1134.9	1187.9
142.5°	1095.6	1141.3
145°	1036.8	1071.3
147.5°	991.6	1020.2
150°	963.2	986.4
152.5°	938.8	956.4
155°	911.0	922.5
157.5°	888.9	897.0
160°	875.7	880.4
162.5°	867.0	871.5
165°	854.6	859.2
167.5°	845.6	847.6
170°	843.2	843.2
172.5°	836.6	834.9
175°	832.6	832.6
177.5°	829.1	827.1
180°	827.1	827.1



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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	1.36	2.13	2.43	3.21	4.67	14.54	15.31	15.61	16.38	17.85
	3H	2.06	2.75	3.14	3.83	5.32	16.38	17.06	17.45	18.15	19.63
	4H	2.36	3.01	3.44	4.09	5.58	17.02	17.67	18.11	18.75	20.25
	6H	2.60	3.20	3.70	4.29	5.79	17.44	18.04	18.54	19.13	20.63
	8H	2.67	3.24	3.77	4.34	5.84	17.56	18.13	18.66	19.24	20.73
	12H	2.68	3.22	3.79	4.32	5.84	17.62	18.17	18.73	19.27	20.79
4H	2H	8.57	9.22	9.66	10.31	11.80	14.81	15.46	15.90	16.54	18.03
	3H	10.13	10.67	11.23	11.78	13.29	16.84	17.39	17.95	18.50	20.00
	4H	10.22	10.72	11.33	11.82	13.35	17.60	18.11	18.71	19.21	20.73
	6H	10.22	10.65	11.34	11.78	13.30	18.14	18.57	19.25	19.69	21.21
	8H	10.20	10.60	11.31	11.72	13.25	18.30	18.70	19.41	19.82	21.35
	12H	10.15	10.51	11.28	11.64	13.18	18.39	18.75	19.52	19.88	21.42
8H	4H	11.65	12.06	12.77	13.17	14.71	17.66	18.06	18.77	19.18	20.71
	6H	11.89	12.22	13.03	13.38	14.91	18.28	18.61	19.42	19.77	21.30
	8H	11.91	12.20	13.05	13.34	14.89	18.50	18.79	19.64	19.93	21.48
	12H	11.87	12.13	13.02	13.26	14.85	18.64	18.90	19.79	20.03	21.62
12H	4H	11.79	12.16	12.93	13.29	14.83	17.60	17.97	18.74	19.10	20.64
	6H	12.15	12.44	13.29	13.58	15.13	18.26	18.56	19.41	19.69	21.25
	8H	12.21	12.47	13.36	13.61	15.19	18.49	18.75	19.64	19.88	21.47