

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: P938282

Luminaire Tested: SQ4-FB-150U-050D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938282
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-B2750-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

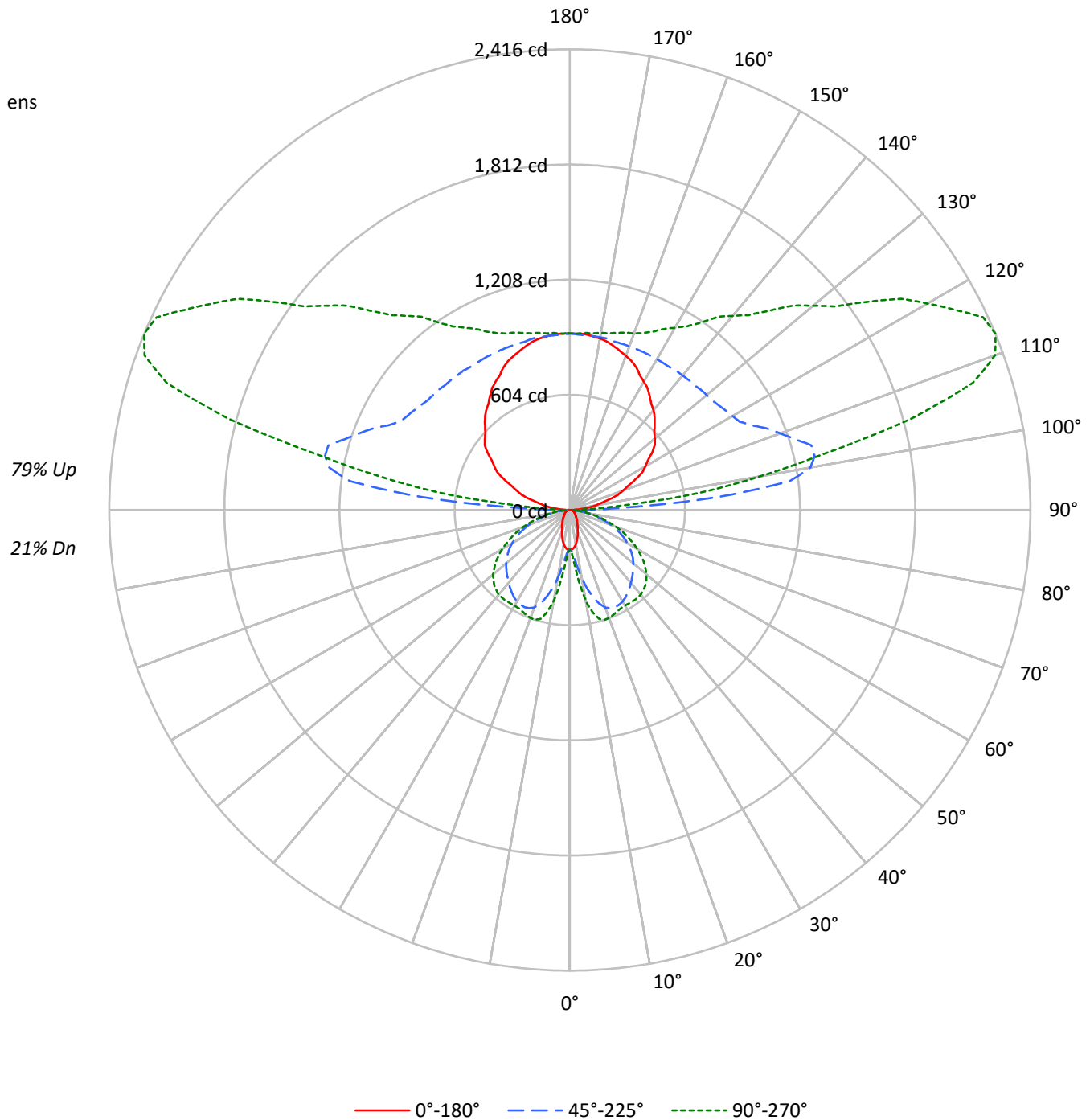
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7611.5 lumens
Efficiency: N/A
Efficacy: 136.9 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_{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: P938282
CATALOG NUMBER: SQ4-FB-150U-050D-B2750-1D-UNV-STD-W-4-2700K

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	0
RCR																		
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	5
9	45	34	26	21	40	30	24	19	23	18	15	17	13	11	10	9	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1928	1928	1928
5°	1882	2226	2591
10°	1705	3244	4297
15°	1448	4235	5188
20°	1177	4904	5288
25°	981	5128	5180
30°	826	5156	5171
35°	728	5067	5304
40°	635	4952	5442
45°	572	4865	5464
50°	524	4788	5374
55°	501	4675	5135
60°	511	4464	4759
65°	529	4144	4242
70°	559	3607	3585
75°	613	2934	2797
80°	655	2027	1886
85°	555	1070	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5464 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	0.4
10°-20°	119.1	1.6
20°-30°	208.4	2.7
30°-40°	268.2	3.5
40°-50°	299.6	3.9
50°-60°	287.0	3.8
60°-70°	227.4	3.0
70°-80°	133.7	1.8
80°-90°	40.7	0.5
90°-100°	451.2	5.9
100°-110°	1186.2	15.6
110°-120°	1230.0	16.2
120°-130°	986.6	13.0
130°-140°	774.1	10.2
140°-150°	594.2	7.8
150°-160°	427.9	5.6
160°-170°	261.8	3.4
170°-180°	88.5	1.2
0°-30°	354.4	4.7
0°-40°	622.6	8.2
0°-60°	1209.2	15.9
0°-90°	1611.1	21.2
90°-120°	2867.4	37.7
90°-150°	5222.2	68.6
90°-180°	6000.0	78.8
0°-180°	7611.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	202	217	244	277	287	19
15°	152	280	472	572	590	42
25°	97	317	562	587	587	45
35°	65	303	529	559	581	41
45°	45	242	468	536	560	35
55°	32	154	397	461	474	29
65°	25	82	295	331	336	25
75°	19	50	162	178	178	20
85°	7	15	40	44	45	7
90°	6	17	47	24	24	6
95°	60	234	777	401	273	66
105°	214	324	1311	1991	1857	227
115°	380	461	1050	2095	2392	375
125°	528	592	956	1614	1905	469
135°	629	693	926	1303	1478	487
145°	730	776	914	1112	1199	457
155°	825	848	914	1003	1032	379
165°	890	902	914	950	962	251
175°	926	926	920	932	932	88
180°	926	926	926	926	926	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
2.5°	207.8	207.8	209.2	209.8	211.2	211.8	213.1	214.4	218.5	219.1	220.5
5°	202.5	205.2	213.8	217.1	226.5	239.2	244.5	253.3	271.3	276.6	280.0
7.5°	194.4	200.5	221.8	227.2	250.6	284.0	298.0	316.7	345.4	359.5	370.8
10°	181.8	194.4	232.6	245.2	283.3	334.1	360.2	386.2	429.7	449.0	456.4
12.5°	167.7	188.4	243.9	261.3	316.0	390.2	421.6	450.4	499.8	525.9	529.9
15°	151.7	179.8	254.6	280.0	350.8	436.9	471.7	507.2	553.3	571.9	576.6
17.5°	137.6	173.1	264.6	291.3	377.5	479.1	514.5	543.9	581.3	594.0	597.3
20°	120.3	162.3	271.3	306.1	405.6	509.9	543.9	566.6	592.0	600.0	601.4
22.5°	107.6	151.0	275.3	311.3	424.3	528.5	557.3	575.3	592.6	595.3	596.0
25°	96.9	138.3	274.6	317.4	440.3	539.8	561.9	575.3	585.3	586.6	586.6
27.5°	86.9	124.3	271.9	318.7	452.4	542.5	560.0	569.3	574.0	576.6	576.6
30°	78.2	111.0	265.2	316.0	457.7	539.8	553.9	558.6	563.2	567.3	569.3
32.5°	71.5	98.2	255.3	310.7	458.4	533.2	543.2	545.9	552.6	561.9	565.2
35°	65.4	85.6	243.9	303.4	454.4	522.5	529.2	531.9	545.2	559.3	563.9
37.5°	59.5	76.2	229.2	290.6	448.3	509.9	514.5	519.2	539.8	556.6	561.9
40°	53.5	68.1	211.8	276.6	439.0	494.4	498.5	505.8	533.2	552.6	558.0
42.5°	48.8	61.5	193.1	261.9	427.0	477.1	483.1	493.8	525.2	545.9	551.9
45°	44.7	54.8	173.1	241.8	411.5	459.1	467.7	482.5	515.8	535.8	541.2
47.5°	40.7	50.1	152.4	221.2	394.9	441.0	452.4	469.0	503.2	522.5	527.2
50°	37.4	45.4	131.7	199.1	376.9	421.6	435.0	452.4	487.1	505.2	511.1
52.5°	34.8	41.4	112.2	177.1	356.2	401.6	416.9	435.0	467.7	485.1	489.1
55°	32.1	38.0	95.5	153.7	334.8	380.2	396.9	414.2	446.3	461.0	463.7
57.5°	30.8	35.5	81.5	131.7	312.0	356.2	374.8	390.8	420.9	432.3	435.0
60°	28.7	33.4	70.8	112.9	287.3	333.5	349.5	365.5	390.8	400.2	402.3
62.5°	26.7	32.1	62.8	94.9	261.9	306.7	322.7	337.4	358.8	365.5	368.1
65°	25.4	30.8	56.8	81.5	235.9	278.6	294.6	307.4	324.7	331.4	332.8
67.5°	24.1	29.4	52.1	70.1	209.8	250.6	262.5	274.6	287.9	294.6	295.3
70°	22.0	28.1	48.1	62.2	183.1	218.5	228.5	241.2	251.9	255.3	257.3
72.5°	20.7	26.1	45.4	56.2	155.7	187.7	197.1	204.5	213.8	217.1	217.1
75°	18.7	23.4	42.7	50.1	127.6	153.7	161.7	169.0	176.4	177.7	175.7
77.5°	16.7	20.7	36.8	42.1	99.6	121.6	128.3	132.3	138.3	139.6	140.3
80°	14.0	18.0	28.7	32.8	72.2	89.5	94.2	97.5	102.9	102.9	104.3
82.5°	10.7	14.0	20.7	23.4	48.8	61.5	65.4	67.5	70.8	70.8	70.8
85°	6.7	8.7	13.3	15.3	29.4	37.4	40.1	40.7	43.4	44.1	44.1
87.5°	3.4	4.7	8.7	9.4	15.3	19.4	19.4	20.7	20.7	20.0	19.4
90°	6.2	11.2	16.1	17.4	27.4	40.6	47.2	41.9	31.5	23.6	23.6
92.5°	24.8	67.0	109.4	119.9	168.5	233.4	265.8	233.0	167.3	118.0	113.3
95°	59.7	137.0	214.2	233.6	414.7	656.4	777.2	693.5	526.2	400.7	386.4
97.5°	103.1	171.3	239.5	256.6	558.7	961.5	1162.9	1110.0	1004.3	925.0	897.9
100°	136.7	198.5	260.4	275.8	611.0	1058.1	1281.6	1285.4	1293.2	1299.0	1266.7
102.5°	165.2	223.0	280.7	295.1	635.1	1088.4	1315.1	1382.4	1517.2	1618.3	1590.7
105°	213.7	262.6	311.4	323.7	652.9	1091.8	1311.3	1462.3	1764.4	1991.0	1976.2
107.5°	263.4	309.0	354.6	365.9	656.3	1043.3	1236.8	1447.5	1868.8	2184.8	2188.4
110°	296.9	338.0	379.3	389.5	651.3	1000.2	1174.7	1410.2	1881.2	2234.5	2250.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	329.9	369.1	408.4	418.1	651.5	962.6	1118.2	1359.2	1841.3	2202.9	2226.6
115°	379.6	415.7	451.9	460.9	657.5	919.5	1050.5	1282.6	1747.1	2095.4	2128.4
117.5°	428.7	461.5	494.4	502.6	669.7	892.5	1003.9	1213.4	1632.5	1946.9	1983.4
120°	457.2	488.1	519.0	526.8	679.6	883.4	985.2	1176.7	1559.6	1846.9	1882.3
122.5°	485.2	516.3	547.6	555.4	693.9	878.7	971.0	1143.4	1488.2	1746.9	1781.8
125°	528.1	556.5	585.0	592.0	713.1	874.7	955.5	1101.9	1394.8	1614.5	1646.8
127.5°	562.8	591.5	620.2	627.4	732.4	872.4	942.4	1068.2	1319.7	1508.3	1535.5
130°	581.5	612.3	643.2	651.0	746.5	873.8	937.4	1049.4	1273.3	1441.2	1466.3
132.5°	600.7	631.7	662.5	670.3	757.9	874.7	933.1	1033.3	1233.7	1384.0	1406.6
135°	629.3	657.5	685.5	692.6	770.3	873.8	925.6	1009.5	1177.4	1303.3	1322.7
137.5°	658.5	686.3	714.2	721.2	788.9	879.3	924.4	995.3	1137.2	1243.7	1259.5
140°	682.8	708.5	734.2	740.5	800.4	880.2	920.0	981.3	1103.9	1195.8	1210.6
142.5°	701.4	725.1	748.8	754.8	809.8	883.3	920.0	973.9	1081.6	1162.3	1175.1
145°	730.0	750.7	771.3	776.5	822.3	883.4	913.8	957.9	1045.9	1111.9	1121.6
147.5°	758.5	778.7	798.8	803.9	840.5	889.4	913.8	948.5	1017.7	1069.7	1077.7
150°	777.2	795.4	813.5	818.1	850.0	892.5	913.8	943.1	1001.6	1045.5	1052.0
152.5°	796.4	810.2	824.0	827.5	856.3	894.6	913.8	938.8	988.8	1026.3	1031.2
155°	825.0	835.2	845.4	848.0	869.9	899.2	913.8	933.8	973.5	1003.3	1006.6
157.5°	846.1	856.1	865.9	868.4	883.6	903.8	913.8	929.3	960.1	983.4	985.6
160°	860.3	868.1	875.9	877.8	889.8	905.9	913.8	927.1	953.6	973.4	974.7
162.5°	874.7	880.5	886.2	887.7	896.4	908.1	913.8	925.0	947.4	964.1	965.3
165°	890.2	895.4	900.7	902.0	906.0	911.2	913.8	921.8	937.8	949.8	951.1
167.5°	904.5	907.0	909.4	910.0	913.3	917.8	920.0	925.3	935.7	943.6	944.2
170°	913.8	916.3	918.8	919.4	919.6	919.9	920.0	925.3	935.7	943.6	943.6
172.5°	918.8	919.3	919.9	920.0	920.0	920.0	920.0	924.2	932.5	938.6	938.1
175°	925.6	925.6	925.6	925.6	923.7	921.2	920.0	922.6	927.9	931.9	931.9
177.5°	925.6	925.6	925.6	925.6	924.2	922.3	921.3	923.4	927.5	930.6	930.0
180°	925.6	925.6	925.6	925.6	925.6	925.6	925.6	925.6	925.6	925.6	925.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	207.8	207.8
2.5°	221.8	220.5
5°	285.4	286.6
7.5°	384.2	383.6
10°	477.8	483.8
12.5°	545.9	547.2
15°	587.3	590.0
17.5°	603.4	604.1
20°	604.1	602.7
22.5°	596.7	595.3
25°	588.0	587.3
27.5°	580.0	580.7
30°	576.6	578.7
32.5°	576.6	580.0
35°	578.0	581.3
37.5°	577.3	581.3
40°	574.6	579.3
42.5°	567.3	570.6
45°	555.9	560.0
47.5°	541.2	543.9
50°	522.5	525.2
52.5°	499.1	499.8
55°	471.1	473.7
57.5°	441.0	441.6
60°	407.6	409.6
62.5°	372.2	372.2
65°	334.8	336.1
67.5°	296.0	299.3
70°	256.6	257.3
72.5°	217.8	217.8
75°	177.7	178.4
77.5°	139.6	139.6
80°	103.6	104.3
82.5°	71.5	72.8
85°	44.7	44.7
87.5°	20.7	18.7
90°	23.6	23.6
92.5°	94.5	75.8
95°	329.6	272.7
97.5°	789.7	681.5
100°	1137.8	1008.8
102.5°	1480.3	1369.8
105°	1916.8	1857.4
107.5°	2202.8	2217.1
110°	2311.8	2373.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2321.6	2416.5
115°	2260.0	2391.7
117.5°	2129.4	2275.5
120°	2024.3	2166.2
122.5°	1921.9	2061.8
125°	1775.7	1904.7
127.5°	1644.3	1753.1
130°	1566.8	1667.3
132.5°	1496.5	1586.5
135°	1400.3	1477.9
137.5°	1323.1	1386.5
140°	1270.0	1329.4
142.5°	1226.2	1277.2
145°	1160.3	1199.0
147.5°	1109.7	1141.8
150°	1078.0	1103.9
152.5°	1050.8	1070.3
155°	1019.5	1032.5
157.5°	994.7	1003.9
160°	980.0	985.2
162.5°	970.3	975.3
165°	956.4	961.6
167.5°	946.4	948.6
170°	943.6	943.6
172.5°	936.2	934.3
175°	931.9	931.9
177.5°	927.8	925.6
180°	925.6	925.6



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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	0.00	0.36	0.86	1.52	3.15	12.84	13.50	14.00	14.65	16.28
	3H	0.39	0.98	1.56	2.15	3.79	14.65	15.24	15.82	16.40	18.05
	4H	0.68	1.25	1.86	2.41	4.06	15.27	15.84	16.45	17.00	18.65
	6H	0.92	1.44	2.11	2.60	4.26	15.68	16.20	16.87	17.36	19.02
	8H	0.98	1.48	2.17	2.66	4.31	15.79	16.28	16.98	17.46	19.11
	12H	0.99	1.46	2.19	2.63	4.31	15.84	16.31	17.04	17.48	19.16
4H	2H	6.86	7.43	8.05	8.59	10.24	13.09	13.65	14.28	14.82	16.46
	3H	8.41	8.89	9.61	10.08	11.74	15.10	15.57	16.29	16.76	18.42
	4H	8.50	8.94	9.70	10.11	11.79	15.85	16.28	17.04	17.46	19.14
	6H	8.50	8.87	9.70	10.07	11.74	16.36	16.74	17.56	17.93	19.60
	8H	8.47	8.82	9.67	10.01	11.69	16.51	16.86	17.71	18.05	19.73
	12H	8.42	8.74	9.63	9.93	11.62	16.59	16.90	17.80	18.10	19.79
8H	4H	9.92	10.27	11.12	11.46	13.14	15.89	16.24	17.09	17.43	19.11
	6H	10.15	10.44	11.37	11.67	13.35	16.50	16.79	17.72	18.02	19.70
	8H	10.17	10.42	11.39	11.62	13.33	16.71	16.96	17.93	18.17	19.87
	12H	10.13	10.35	11.35	11.55	13.28	16.83	17.05	18.06	18.26	19.99
12H	4H	10.05	10.37	11.26	11.56	13.25	15.83	16.15	17.05	17.35	19.04
	6H	10.40	10.65	11.63	11.86	13.56	16.48	16.73	17.70	17.94	19.64
	8H	10.46	10.68	11.69	11.89	13.62	16.69	16.91	17.92	18.12	19.85