

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: P938283

Luminaire Tested: SQ4-FB-150U-050D-B2750-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938283
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-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

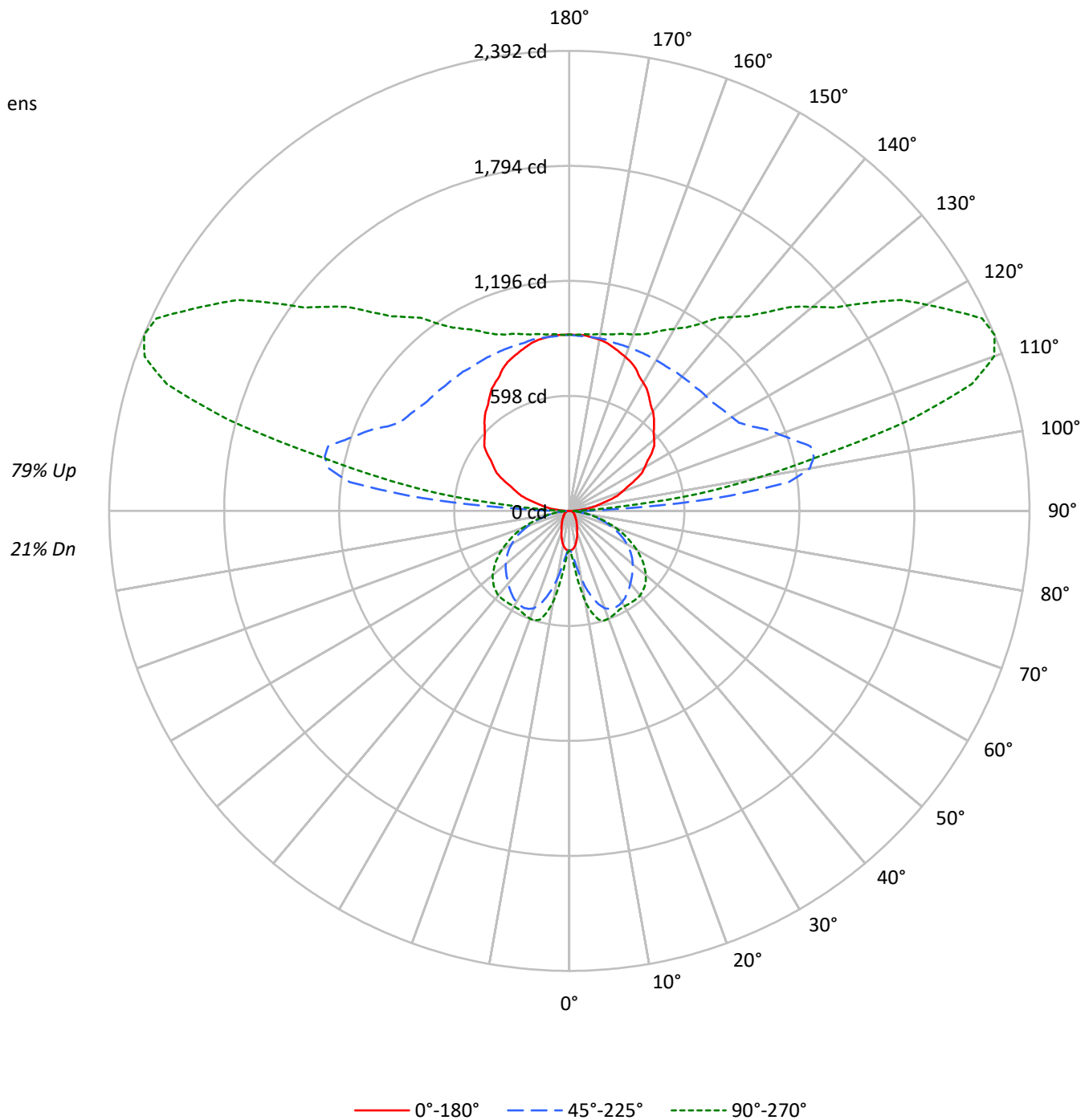
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7535.1 lumens
Efficiency: N/A
Efficacy: 135.5 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: P938283
CATALOG NUMBER: SQ4-FB-150U-050D-B2750-1D-UNV-STD-W-4-3000K

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°	1909	1909	1909
5°	1864	2205	2566
10°	1688	3211	4254
15°	1433	4192	5137
20°	1165	4855	5234
25°	971	5077	5128
30°	818	5104	5119
35°	721	5016	5250
40°	628	4902	5388
45°	567	4816	5409
50°	520	4739	5319
55°	495	4628	5083
60°	505	4419	4710
65°	523	4103	4199
70°	553	3571	3548
75°	607	2903	2769
80°	651	2008	1866
85°	547	1060	954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5409 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.6	0.4
10°-20°	117.9	1.6
20°-30°	206.3	2.7
30°-40°	265.6	3.5
40°-50°	296.6	3.9
50°-60°	284.1	3.8
60°-70°	225.1	3.0
70°-80°	132.4	1.8
80°-90°	40.3	0.5
90°-100°	446.7	5.9
100°-110°	1174.3	15.6
110°-120°	1217.6	16.2
120°-130°	976.7	13.0
130°-140°	766.3	10.2
140°-150°	588.2	7.8
150°-160°	423.6	5.6
160°-170°	259.2	3.4
170°-180°	87.6	1.2
0°-30°	350.8	4.7
0°-40°	616.4	8.2
0°-60°	1197.1	15.9
0°-90°	1594.9	21.2
90°-120°	2838.6	37.7
90°-150°	5169.8	68.6
90°-180°	5940.0	78.8
0°-180°	7535.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	200	215	242	274	284	19
15°	150	277	467	566	584	42
25°	96	314	556	581	581	44
35°	65	300	524	554	575	40
45°	44	239	463	530	554	34
55°	32	152	393	456	469	29
65°	25	81	292	328	333	25
75°	18	50	160	176	177	19
85°	7	15	40	44	44	7
90°	6	17	47	23	23	6
95°	59	231	769	397	270	66
105°	212	320	1298	1971	1839	224
115°	376	456	1040	2074	2368	371
125°	523	586	946	1598	1886	464
135°	623	686	916	1290	1463	482
145°	723	769	905	1101	1187	453
155°	817	840	905	993	1022	375
165°	881	893	905	940	952	249
175°	916	916	911	922	922	87
180°	916	916	916	916	916	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7
2.5°	205.7	205.7	207.1	207.7	209.0	209.7	211.0	212.3	216.3	216.9	218.3
5°	200.5	203.1	211.7	214.9	224.2	236.8	242.1	250.7	268.6	273.8	277.2
7.5°	192.5	198.5	219.6	224.9	248.1	281.1	295.0	313.5	341.9	355.8	367.1
10°	179.9	192.5	230.2	242.8	280.4	330.7	356.5	382.4	425.4	444.5	451.8
12.5°	166.0	186.6	241.5	258.6	312.9	386.3	417.4	445.9	494.8	520.6	524.6
15°	150.2	178.0	252.0	277.2	347.3	432.6	467.0	502.1	547.7	566.2	570.8
17.5°	136.3	171.4	262.0	288.4	373.7	474.3	509.4	538.5	575.4	588.1	591.3
20°	119.1	160.7	268.6	303.0	401.5	504.7	538.5	560.9	586.1	594.0	595.3
22.5°	106.5	149.5	272.5	308.2	420.0	523.2	551.7	569.5	586.7	589.3	590.0
25°	95.9	137.0	271.8	314.2	435.9	534.4	556.3	569.5	579.5	580.8	580.8
27.5°	86.0	123.1	269.2	315.5	447.8	537.1	554.3	563.6	568.2	570.8	570.8
30°	77.4	109.8	262.6	312.9	453.1	534.4	548.3	552.9	557.6	561.6	563.6
32.5°	70.8	97.2	252.7	307.5	453.8	527.8	537.8	540.4	547.0	556.3	559.6
35°	64.8	84.7	241.5	300.3	449.8	517.3	523.9	526.5	539.7	553.6	558.3
37.5°	58.9	75.4	226.9	287.7	443.8	504.7	509.4	514.0	534.4	551.0	556.3
40°	52.9	67.4	209.7	273.8	434.6	489.5	493.5	500.7	527.8	547.0	552.4
42.5°	48.3	60.8	191.2	259.3	422.7	472.3	478.2	488.9	519.9	540.4	546.3
45°	44.3	54.2	171.4	239.4	407.4	454.4	463.0	477.6	510.6	530.5	535.8
47.5°	40.3	49.6	150.9	219.0	390.9	436.6	447.8	464.3	498.1	517.3	521.9
50°	37.1	45.0	130.3	197.1	373.1	417.4	430.6	447.8	482.3	500.1	506.0
52.5°	34.4	41.0	111.1	175.3	352.6	397.6	412.7	430.6	463.0	480.2	484.2
55°	31.7	37.7	94.6	152.1	331.4	376.4	392.9	410.1	441.8	456.4	459.1
57.5°	30.5	35.1	80.7	130.3	308.9	352.6	371.0	386.9	416.7	427.9	430.6
60°	28.4	33.0	70.1	111.8	284.5	330.1	346.0	361.9	386.9	396.2	398.2
62.5°	26.4	31.7	62.2	94.0	259.3	303.6	319.5	334.1	355.2	361.9	364.4
65°	25.1	30.5	56.2	80.7	233.5	275.8	291.7	304.3	321.4	328.0	329.4
67.5°	23.9	29.1	51.6	69.4	207.7	248.1	259.9	271.8	285.1	291.7	292.3
70°	21.8	27.8	47.6	61.5	181.2	216.3	226.2	238.8	249.4	252.7	254.7
72.5°	20.5	25.8	45.0	55.6	154.1	185.9	195.1	202.4	211.7	214.9	214.9
75°	18.5	23.2	42.3	49.6	126.3	152.1	160.0	167.3	174.6	175.9	173.9
77.5°	16.6	20.5	36.4	41.7	98.6	120.4	127.0	130.9	137.0	138.2	138.9
80°	13.9	17.8	28.4	32.4	71.5	88.6	93.3	96.5	101.9	101.9	103.2
82.5°	10.6	13.9	20.5	23.2	48.3	60.8	64.8	66.9	70.1	70.1	70.1
85°	6.6	8.6	13.2	15.2	29.1	37.1	39.7	40.3	43.0	43.7	43.7
87.5°	3.4	4.6	8.6	9.3	15.2	19.2	19.2	20.5	20.5	19.8	19.2
90°	6.1	11.0	16.0	17.3	27.1	40.2	46.7	41.5	31.2	23.4	23.4
92.5°	24.6	66.4	108.3	118.7	166.8	231.0	263.2	230.6	165.6	116.8	112.2
95°	59.1	135.6	212.1	231.2	410.6	649.8	769.4	686.6	520.9	396.7	382.6
97.5°	102.1	169.6	237.1	254.0	553.0	951.9	1151.3	1098.9	994.2	915.7	888.9
100°	135.3	196.5	257.7	273.0	604.9	1047.4	1268.7	1272.5	1280.2	1285.9	1254.0
102.5°	163.6	220.8	277.9	292.2	628.8	1077.5	1301.9	1368.6	1502.0	1602.1	1574.7
105°	211.6	260.0	308.3	320.4	646.3	1080.9	1298.2	1447.6	1746.7	1971.0	1956.3
107.5°	260.8	305.9	351.0	362.3	649.7	1032.8	1224.4	1433.0	1850.0	2162.9	2166.4
110°	293.9	334.6	375.5	385.6	644.7	990.1	1162.9	1396.1	1862.4	2212.1	2227.4



TEST NUMBER: P938283

CATALOG NUMBER: SQ4-FB-150U-050D-B2750-1D-UNV-STD-W-4-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	326.6	365.4	404.3	413.9	644.9	953.0	1107.0	1345.6	1822.8	2180.7	2204.2
115°	375.8	411.6	447.3	456.3	650.9	910.3	1039.9	1269.8	1729.5	2074.3	2107.0
117.5°	424.4	456.9	489.5	497.5	663.0	883.6	993.8	1201.2	1616.2	1927.3	1963.5
120°	452.6	483.2	513.8	521.5	672.7	874.5	975.4	1164.9	1544.0	1828.3	1863.4
122.5°	480.3	511.1	542.1	549.8	686.9	869.8	961.3	1131.9	1473.3	1729.3	1764.0
125°	522.8	550.9	579.1	586.1	706.0	865.9	945.9	1090.8	1380.8	1598.3	1630.3
127.5°	557.2	585.6	614.0	621.1	725.0	863.6	933.0	1057.5	1306.4	1493.2	1520.1
130°	575.6	606.2	636.8	644.4	739.0	865.0	928.0	1038.8	1260.5	1426.7	1451.6
132.5°	594.7	625.3	655.9	663.6	750.2	865.9	923.7	1022.9	1221.4	1370.1	1392.4
135°	623.0	650.9	678.7	685.7	762.6	865.0	916.3	999.4	1165.6	1290.2	1309.4
137.5°	651.8	679.5	707.1	714.0	781.0	870.4	915.1	985.3	1125.8	1231.2	1246.9
140°	675.9	701.3	726.8	733.1	792.3	871.3	910.8	971.4	1092.8	1183.8	1198.5
142.5°	694.3	717.8	741.3	747.2	801.7	874.4	910.8	964.1	1070.7	1150.7	1163.3
145°	722.6	743.1	763.6	768.7	814.0	874.5	904.7	948.2	1035.4	1100.8	1110.3
147.5°	750.8	770.9	790.8	795.8	832.1	880.5	904.7	939.0	1007.5	1059.0	1066.9
150°	769.4	787.4	805.4	809.9	841.5	883.6	904.7	933.6	991.5	1035.0	1041.4
152.5°	788.4	802.1	815.7	819.2	847.7	885.6	904.7	929.4	978.9	1016.0	1020.8
155°	816.7	826.9	836.9	839.5	861.2	890.2	904.7	924.4	963.7	993.2	996.5
157.5°	837.6	847.5	857.2	859.7	874.7	894.7	904.7	919.9	950.5	973.5	975.7
160°	851.7	859.4	867.1	869.0	880.9	896.8	904.7	917.8	944.0	963.6	964.9
162.5°	865.9	871.6	877.3	878.8	887.4	898.9	904.7	915.7	937.9	954.4	955.6
165°	881.3	886.4	891.6	892.9	896.9	902.1	904.7	912.5	928.4	940.2	941.5
167.5°	895.4	897.9	900.3	900.9	904.2	908.6	910.8	916.0	926.3	934.1	934.7
170°	904.7	907.1	909.6	910.2	910.4	910.7	910.8	916.0	926.3	934.1	934.1
172.5°	909.6	910.1	910.7	910.8	910.8	910.8	910.8	914.9	923.1	929.2	928.7
175°	916.3	916.3	916.3	916.3	914.4	912.0	910.8	913.3	918.6	922.5	922.5
177.5°	916.3	916.3	916.3	916.3	914.9	913.0	912.0	914.1	918.2	921.2	920.6
180°	916.3	916.3	916.3	916.3	916.3	916.3	916.3	916.3	916.3	916.3	916.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	205.7	205.7
2.5°	219.6	218.3
5°	282.5	283.8
7.5°	380.3	379.7
10°	473.0	478.9
12.5°	540.4	541.7
15°	581.4	584.1
17.5°	597.3	598.0
20°	598.0	596.6
22.5°	590.7	589.3
25°	582.1	581.4
27.5°	574.1	574.8
30°	570.8	572.9
32.5°	570.8	574.1
35°	572.2	575.4
37.5°	571.5	575.4
40°	568.8	573.5
42.5°	561.6	564.9
45°	550.3	554.3
47.5°	535.8	538.5
50°	517.3	519.9
52.5°	494.1	494.8
55°	466.4	468.9
57.5°	436.6	437.2
60°	403.5	405.4
62.5°	368.5	368.5
65°	331.4	332.7
67.5°	293.0	296.3
70°	254.0	254.7
72.5°	215.6	215.6
75°	175.9	176.6
77.5°	138.2	138.2
80°	102.5	103.2
82.5°	70.8	72.1
85°	44.3	44.3
87.5°	20.5	18.5
90°	23.4	23.4
92.5°	93.6	75.0
95°	326.3	270.0
97.5°	781.8	674.6
100°	1126.4	998.7
102.5°	1465.4	1356.0
105°	1897.6	1838.8
107.5°	2180.6	2194.8
110°	2288.6	2349.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2298.3	2392.2
115°	2237.3	2367.7
117.5°	2108.1	2252.6
120°	2003.9	2144.5
122.5°	1902.6	2041.1
125°	1757.8	1885.5
127.5°	1627.8	1735.5
130°	1551.1	1650.6
132.5°	1481.5	1570.6
135°	1386.2	1463.0
137.5°	1309.8	1372.6
140°	1257.2	1316.0
142.5°	1213.9	1264.3
145°	1148.7	1186.9
147.5°	1098.6	1130.4
150°	1067.1	1092.8
152.5°	1040.2	1059.6
155°	1009.3	1022.1
157.5°	984.7	993.8
160°	970.1	975.4
162.5°	960.6	965.5
165°	946.8	952.0
167.5°	936.9	939.1
170°	934.1	934.1
172.5°	926.8	925.0
175°	922.5	922.5
177.5°	918.5	916.3
180°	916.3	916.3



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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	0.33	0.83	1.48	3.11	12.80	13.47	13.97	14.62	16.25
	3H	0.35	0.95	1.53	2.11	3.76	14.61	15.21	15.78	16.37	18.01
	4H	0.64	1.21	1.83	2.37	4.02	15.24	15.80	16.42	16.96	18.61
	6H	0.88	1.41	2.07	2.57	4.23	15.64	16.16	16.83	17.33	18.99
	8H	0.95	1.44	2.14	2.62	4.27	15.75	16.25	16.94	17.43	19.08
	12H	0.96	1.43	2.15	2.60	4.27	15.81	16.28	17.00	17.45	19.12
4H	2H	6.83	7.40	8.02	8.56	10.21	13.05	13.62	14.24	14.78	16.43
	3H	8.38	8.85	9.57	10.04	11.70	15.06	15.54	16.26	16.73	18.39
	4H	8.47	8.90	9.66	10.08	11.76	15.81	16.25	17.01	17.42	19.10
	6H	8.47	8.84	9.67	10.04	11.70	16.33	16.70	17.53	17.90	19.56
	8H	8.44	8.79	9.64	9.97	11.66	16.48	16.83	17.67	18.01	19.70
	12H	8.38	8.70	9.60	9.90	11.59	16.55	16.87	17.77	18.07	19.76
8H	4H	9.88	10.23	11.08	11.42	13.11	15.86	16.20	17.05	17.39	19.08
	6H	10.12	10.40	11.33	11.64	13.32	16.46	16.75	17.68	17.98	19.66
	8H	10.13	10.38	11.35	11.59	13.29	16.67	16.92	17.89	18.13	19.83
	12H	10.09	10.31	11.32	11.52	13.25	16.80	17.02	18.03	18.22	19.96
12H	4H	10.01	10.33	11.23	11.53	13.22	15.80	16.12	17.01	17.31	19.00
	6H	10.37	10.62	11.59	11.83	13.53	16.44	16.69	17.67	17.90	19.60
	8H	10.43	10.65	11.65	11.85	13.58	16.66	16.88	17.88	18.08	19.81