

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: P936353

Luminaire Tested: SQ4-FB-025U-075D-93050-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936353
REPORT IS A COMBINATION OF REPORTS P933430 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-93050-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

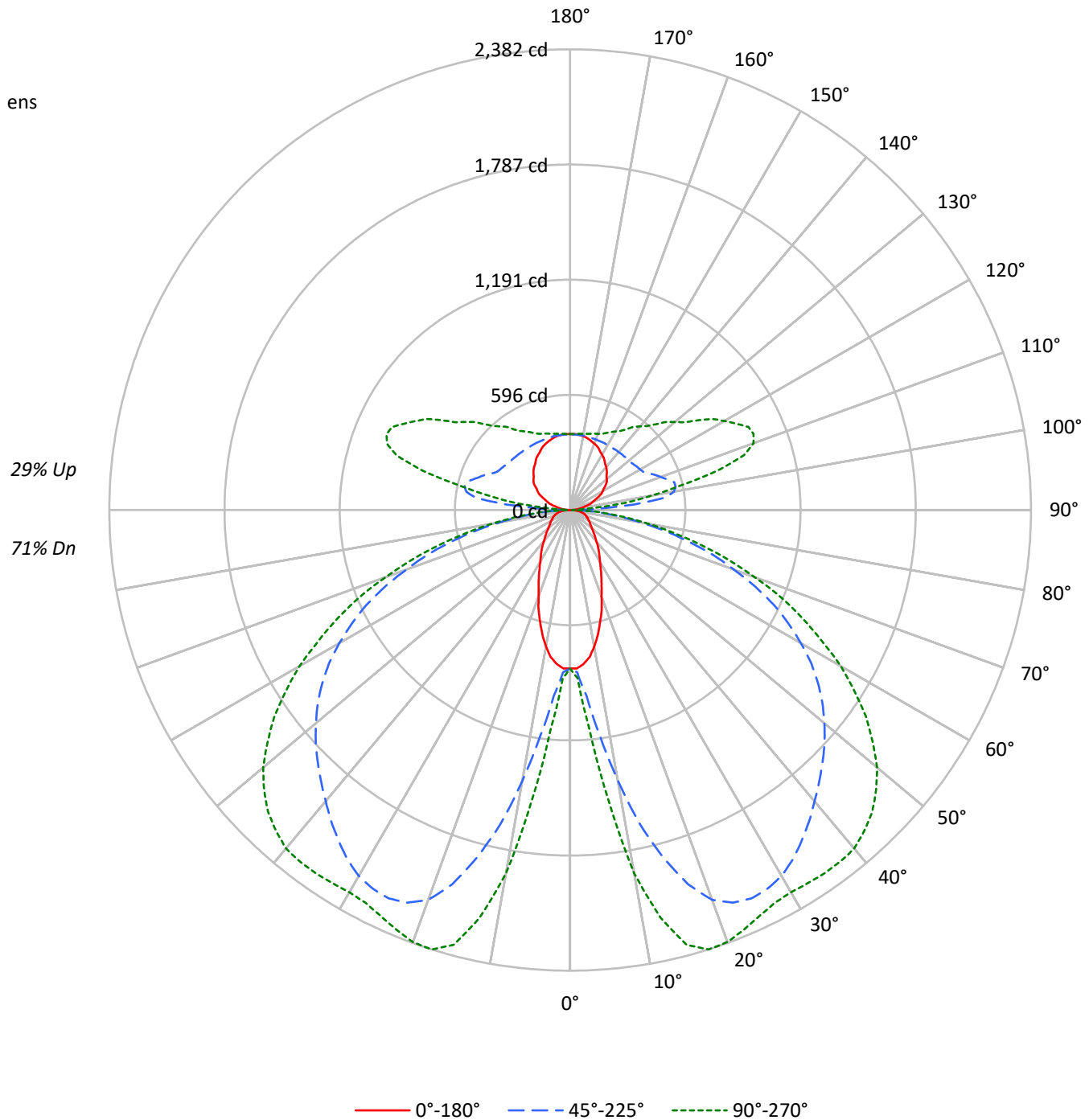
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8890.1 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 90
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: P936353
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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
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71		
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58		
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48		
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39		
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33		
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28		
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24		
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21		
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18		
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16		
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2535	2535	2535
5°	2477	2930	3407
10°	2248	4273	5649
15°	1911	5583	6820
20°	1556	6472	6951
25°	1299	6774	6810
30°	1096	6819	6797
35°	969	6707	6973
40°	845	6562	7154
45°	766	6456	7182
50°	703	6361	7063
55°	674	6222	6750
60°	691	5951	6256
65°	720	5539	5577
70°	769	4833	4711
75°	855	3944	3676
80°	941	2739	2477
85°	852	1456	1268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7182 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	1.2
10°-20°	469.8	5.3
20°-30°	821.8	9.2
30°-40°	1057.9	11.9
40°-50°	1181.6	13.3
50°-60°	1131.7	12.7
60°-70°	896.9	10.1
70°-80°	527.4	5.9
80°-90°	148.0	1.7
90°-100°	191.7	2.2
100°-110°	503.9	5.7
110°-120°	522.5	5.9
120°-130°	419.1	4.7
130°-140°	328.9	3.7
140°-150°	252.4	2.8
150°-160°	181.8	2.0
160°-170°	111.2	1.3
170°-180°	37.6	0.4
0°-30°	1397.6	15.7
0°-40°	2455.5	27.6
0°-60°	4768.8	53.6
0°-90°	6341.0	71.3
90°-120°	1218.1	13.7
90°-150°	2218.5	25.0
90°-180°	2549.0	28.7
0°-180°	8890.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	798	856	964	1091	1130	74
15°	598	1104	1860	2256	2327	166
25°	382	1252	2216	2314	2316	176
35°	258	1196	2087	2206	2292	161
45°	176	954	1844	2113	2208	137
55°	126	606	1565	1818	1868	115
65°	100	322	1162	1307	1325	99
75°	74	198	638	701	704	77
85°	26	61	158	174	176	28
90°	3	7	20	10	10	4
95°	25	99	330	170	116	28
105°	91	138	557	846	789	96
115°	161	196	446	890	1016	159
125°	224	252	406	686	809	199
135°	267	294	393	554	628	207
145°	310	330	388	472	509	194
155°	350	360	388	426	439	161
165°	378	383	388	404	408	107
175°	393	393	391	396	396	37
180°	393	393	393	393	393	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5
2.5°	819.5	819.5	824.7	827.4	832.6	835.3	840.5	845.8	861.6	864.2	869.5
5°	798.4	808.9	843.2	856.3	893.2	943.3	964.4	998.7	1069.9	1090.9	1104.1
7.5°	766.8	790.5	874.8	895.9	988.1	1119.9	1175.3	1249.0	1362.3	1417.7	1462.5
10°	716.7	766.8	916.9	967.0	1117.3	1317.5	1420.3	1523.1	1694.3	1770.7	1799.7
12.5°	661.4	743.0	961.7	1030.3	1246.4	1538.9	1662.7	1776.0	1971.0	2073.8	2089.6
15°	598.1	708.8	1004.0	1104.1	1383.4	1723.3	1860.3	2000.0	2181.8	2255.6	2274.0
17.5°	542.8	682.4	1043.5	1148.9	1488.8	1889.3	2029.0	2144.9	2292.5	2342.5	2355.7
20°	474.3	640.3	1069.9	1206.9	1599.5	2010.5	2144.9	2234.5	2334.6	2366.2	2371.5
22.5°	424.2	595.5	1085.7	1228.0	1673.3	2084.3	2197.6	2268.7	2337.2	2347.8	2350.4
25°	382.1	545.4	1083.0	1251.7	1736.5	2129.1	2216.0	2268.7	2308.3	2313.5	2313.5
27.5°	342.5	490.1	1072.5	1256.9	1783.9	2139.6	2208.1	2245.0	2263.5	2274.0	2274.0
30°	308.3	437.4	1046.1	1246.4	1805.0	2129.1	2184.4	2202.9	2221.3	2237.1	2245.0
32.5°	281.9	387.3	1006.6	1225.3	1807.6	2102.7	2142.3	2152.8	2179.2	2216.0	2229.2
35°	258.2	337.3	961.7	1196.3	1791.8	2060.6	2086.9	2097.5	2150.2	2205.5	2223.9
37.5°	234.5	300.4	903.8	1146.3	1768.1	2010.5	2029.0	2047.4	2129.1	2195.0	2216.0
40°	210.8	268.8	835.3	1090.9	1731.2	1949.9	1965.7	1994.7	2102.7	2179.2	2200.2
42.5°	192.3	242.4	761.5	1033.0	1683.8	1881.4	1905.1	1947.3	2071.1	2152.8	2176.5
45°	176.5	216.1	682.4	953.8	1623.2	1810.3	1844.5	1902.5	2034.2	2113.3	2134.4
47.5°	160.7	197.6	600.8	872.2	1557.3	1739.1	1783.9	1849.8	1984.2	2060.6	2079.0
50°	147.6	179.2	519.1	785.2	1486.2	1662.7	1715.4	1783.9	1920.9	1992.1	2015.8
52.5°	137.0	163.4	442.7	698.2	1404.5	1583.7	1644.3	1715.4	1844.5	1913.0	1928.8
55°	126.5	150.2	376.8	606.0	1320.2	1499.3	1565.2	1633.7	1760.2	1818.2	1828.7
57.5°	121.2	139.6	321.5	519.1	1230.6	1404.5	1478.3	1541.5	1660.1	1704.9	1715.4
60°	113.3	131.7	279.3	445.3	1133.1	1314.9	1378.1	1441.4	1541.5	1578.4	1586.3
62.5°	105.4	126.5	247.7	374.2	1033.0	1209.5	1272.7	1330.7	1415.0	1441.4	1451.9
65°	100.1	121.2	224.0	321.5	930.1	1098.8	1162.1	1212.1	1280.7	1307.0	1312.3
67.5°	94.9	115.9	205.5	276.7	827.4	988.1	1035.6	1083.0	1135.7	1162.1	1164.7
70°	87.0	110.7	189.7	245.0	722.0	861.6	901.1	951.2	993.4	1006.6	1014.5
72.5°	81.7	102.8	179.2	221.3	613.9	740.4	777.3	806.3	843.2	856.3	856.3
75°	73.8	92.2	168.6	197.6	503.3	606.0	637.6	666.6	695.6	700.9	693.0
77.5°	65.9	81.7	144.9	166.0	392.6	479.6	505.9	521.7	545.4	550.7	553.3
80°	55.3	71.1	113.3	129.1	284.6	353.1	371.5	384.7	405.8	405.8	411.0
82.5°	42.2	55.3	81.7	92.2	192.3	242.4	258.2	266.1	279.3	279.3	279.3
85°	26.3	34.3	52.7	60.6	115.9	147.6	158.1	160.7	171.3	173.9	173.9
87.5°	13.2	18.4	34.3	36.9	60.6	76.4	76.4	81.7	81.7	79.0	76.4
90°	2.6	4.7	6.9	7.4	11.6	17.2	20.0	17.8	13.4	10.0	10.0
92.5°	10.5	28.5	46.5	50.9	71.6	99.2	112.9	99.0	71.1	50.2	48.1
95°	25.3	58.1	91.0	99.2	176.2	278.9	330.2	294.6	223.5	170.2	164.2
97.5°	43.8	72.8	101.8	109.0	237.3	408.5	494.0	471.6	426.7	393.0	381.4
100°	58.1	84.3	110.6	117.2	259.6	449.5	544.5	546.1	549.4	551.8	538.1
102.5°	70.2	94.7	119.2	125.3	269.8	462.4	558.7	587.3	644.5	687.4	675.7
105°	90.8	111.5	132.3	137.5	277.4	463.8	557.1	621.2	749.5	845.8	839.5
107.5°	111.9	131.2	150.6	155.5	278.8	443.2	525.4	614.9	793.9	928.2	929.7
110°	126.1	143.6	161.1	165.5	276.7	424.9	499.1	599.1	799.2	949.3	955.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	140.2	156.8	173.5	177.6	276.8	408.9	475.1	577.5	782.2	935.8	945.9
115°	161.3	176.6	192.0	195.9	279.3	390.6	446.3	544.9	742.2	890.2	904.1
117.5°	182.1	196.0	210.0	213.5	284.5	379.2	426.5	515.6	693.6	827.1	842.6
120°	194.2	207.4	220.5	223.8	288.7	375.2	418.5	499.8	662.6	784.6	799.7
122.5°	206.1	219.4	232.6	235.9	294.8	373.2	412.5	485.7	632.2	742.1	756.9
125°	224.3	236.4	248.6	251.5	303.0	371.6	405.9	468.0	592.5	685.9	699.6
127.5°	239.1	251.3	263.5	266.6	311.2	370.6	400.3	453.7	560.6	640.7	652.3
130°	247.0	260.2	273.3	276.6	317.2	371.2	398.2	445.8	540.9	612.3	623.0
132.5°	255.2	268.3	281.5	284.7	322.0	371.6	396.4	439.0	524.2	588.0	597.6
135°	267.4	279.3	291.2	294.2	327.3	371.3	393.2	428.9	500.2	553.7	561.9
137.5°	279.7	291.6	303.4	306.4	335.2	373.5	392.7	422.8	483.1	528.3	535.1
140°	290.0	300.9	311.9	314.6	340.0	373.9	390.8	416.8	468.9	508.0	514.3
142.5°	297.9	308.0	318.1	320.7	344.0	375.2	390.8	413.7	459.4	493.8	499.2
145°	310.1	318.9	327.7	329.9	349.3	375.2	388.2	406.9	444.3	472.4	476.5
147.5°	322.2	330.8	339.4	341.5	357.0	377.8	388.2	403.0	432.4	454.4	457.9
150°	330.2	337.9	345.6	347.5	361.1	379.2	388.2	400.7	425.5	444.2	446.9
152.5°	338.3	344.2	350.0	351.5	363.7	380.0	388.2	398.8	420.1	436.0	438.1
155°	350.4	354.7	359.1	360.2	369.5	382.0	388.2	396.6	413.6	426.2	427.6
157.5°	359.4	363.6	367.9	369.0	375.4	383.9	388.2	394.8	407.9	417.7	418.7
160°	365.5	368.8	372.1	372.9	378.0	384.8	388.2	393.8	405.1	413.5	414.0
162.5°	371.6	374.1	376.5	377.1	380.8	385.7	388.2	393.0	402.4	409.6	410.1
165°	378.2	380.4	382.7	383.2	384.9	387.1	388.2	391.6	398.4	403.5	404.0
167.5°	384.3	385.3	386.4	386.6	388.0	389.9	390.8	393.0	397.5	400.9	401.1
170°	388.2	389.3	390.3	390.6	390.7	390.8	390.8	393.0	397.5	400.9	400.9
172.5°	390.3	390.6	390.8	390.8	390.8	390.8	390.8	392.6	396.1	398.7	398.6
175°	393.2	393.2	393.2	393.2	392.4	391.4	390.8	392.0	394.2	395.9	395.9
177.5°	393.2	393.2	393.2	393.2	392.6	391.8	391.4	392.2	394.0	395.3	395.1
180°	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2	393.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	819.5	819.5
2.5°	874.8	869.5
5°	1125.2	1130.5
7.5°	1515.2	1512.5
10°	1884.0	1907.8
12.5°	2152.8	2158.1
15°	2316.2	2326.7
17.5°	2379.4	2382.0
20°	2382.0	2376.8
22.5°	2353.1	2347.8
25°	2318.8	2316.2
27.5°	2287.2	2289.8
30°	2274.0	2281.9
32.5°	2274.0	2287.2
35°	2279.3	2292.5
37.5°	2276.6	2292.5
40°	2266.1	2284.5
42.5°	2237.1	2250.3
45°	2192.3	2208.1
47.5°	2134.4	2144.9
50°	2060.6	2071.1
52.5°	1968.4	1971.0
55°	1857.7	1868.2
57.5°	1739.1	1741.8
60°	1607.4	1615.3
62.5°	1467.7	1467.7
65°	1320.2	1325.4
67.5°	1167.3	1180.5
70°	1011.9	1014.5
72.5°	859.0	859.0
75°	700.9	703.5
77.5°	550.7	550.7
80°	408.4	411.0
82.5°	281.9	287.2
85°	176.5	176.5
87.5°	81.7	73.8
90°	10.0	10.0
92.5°	40.2	32.2
95°	140.0	115.8
97.5°	335.5	289.5
100°	483.4	428.6
102.5°	628.8	581.9
105°	814.3	789.1
107.5°	935.8	941.9
110°	982.1	1008.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	986.2	1026.6
115°	960.1	1016.0
117.5°	904.7	966.7
120°	859.9	920.2
122.5°	816.5	875.9
125°	754.3	809.1
127.5°	698.5	744.7
130°	665.7	708.3
132.5°	635.8	674.0
135°	594.9	627.8
137.5°	562.0	589.1
140°	539.5	564.7
142.5°	520.9	542.6
145°	492.9	509.3
147.5°	471.5	485.1
150°	457.9	468.9
152.5°	446.4	454.7
155°	433.1	438.6
157.5°	422.6	426.5
160°	416.3	418.5
162.5°	412.2	414.3
165°	406.3	408.5
167.5°	402.0	403.0
170°	400.9	400.9
172.5°	397.7	396.9
175°	395.9	395.9
177.5°	394.2	393.2
180°	393.2	393.2



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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	5.98	7.14	6.72	7.91	8.83	19.17	20.33	19.91	21.10	22.02
	3H	6.71	7.75	7.46	8.53	9.49	21.04	22.08	21.79	22.86	23.82
	4H	7.02	8.00	7.79	8.79	9.76	21.70	22.69	22.47	23.47	24.44
	6H	7.29	8.20	8.07	8.99	9.98	22.15	23.06	22.94	23.86	24.84
	8H	7.36	8.23	8.16	9.05	10.03	22.28	23.15	23.08	23.97	24.95
	12H	7.39	8.22	8.19	9.03	10.04	22.36	23.19	23.17	24.00	25.02
4H	2H	13.24	14.22	14.02	15.01	15.98	19.48	20.47	20.26	21.25	22.22
	3H	14.83	15.66	15.62	16.48	17.47	21.56	22.39	22.35	23.21	24.19
	4H	14.94	15.69	15.74	16.52	17.53	22.34	23.10	23.15	23.92	24.93
	6H	14.97	15.62	15.79	16.47	17.49	22.90	23.56	23.72	24.40	25.42
	8H	14.95	15.57	15.78	16.41	17.44	23.08	23.69	23.90	24.53	25.56
	12H	14.92	15.48	15.77	16.34	17.38	23.19	23.74	24.03	24.60	25.64
8H	4H	16.41	17.03	17.24	17.87	18.90	22.43	23.04	23.25	23.88	24.91
	6H	16.67	17.18	17.52	18.06	19.10	23.08	23.58	23.93	24.47	25.50
	8H	16.69	17.15	17.56	18.02	19.07	23.30	23.76	24.17	24.63	25.68
	12H	16.67	17.07	17.54	17.94	19.05	23.46	23.86	24.33	24.73	25.84
12H	4H	16.57	17.13	17.42	17.99	19.03	22.40	22.95	23.24	23.81	24.85
	6H	16.93	17.39	17.80	18.27	19.32	23.06	23.52	23.93	24.39	25.44
	8H	17.02	17.42	17.89	18.29	19.39	23.31	23.71	24.18	24.58	25.68