

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: P938583

Luminaire Tested: SQ4-FB-150U-125D-B2750-1D-UNV-W2A-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938583
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-B2750-1D-UNV-W2A-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

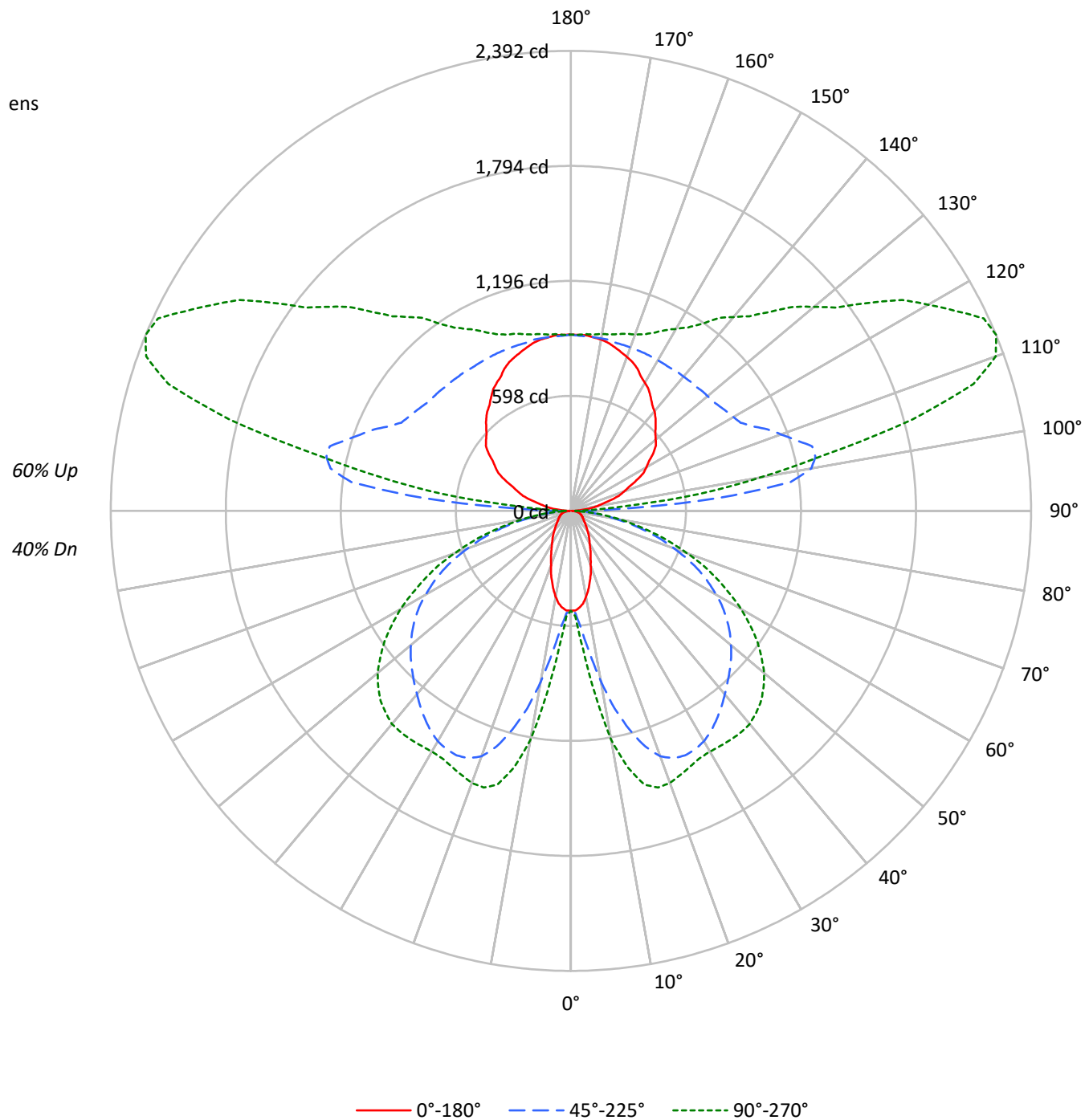
Lumens per Lamp: N/A
Luminaire Lumens: 9957.7 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 83.2
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

TEST NUMBER: P938583

CATALOG NUMBER: SQ4-FB-150U-125D-B2750-1D-UNV-W2A-W-4-3000K

Luminous Intensity Polar Plot



TEST NUMBER: P938583

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4814	4814	4814
5°	4698	5560	6471
10°	4257	8099	10729
15°	3614	10575	12955
20°	2939	12245	13203
25°	2449	12805	12936
30°	2062	12876	12911
35°	1820	12651	13244
40°	1584	12363	13590
45°	1431	12149	13643
50°	1311	11955	13417
55°	1251	11673	12822
60°	1277	11146	11884
65°	1321	10351	10593
70°	1396	9008	8950
75°	1531	7327	6984
80°	1638	5064	4706
85°	1383	2672	2409

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13643 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	0.7
10°-20°	297.5	3.0
20°-30°	520.3	5.2
30°-40°	669.8	6.7
40°-50°	748.2	7.5
50°-60°	716.6	7.2
60°-70°	567.9	5.7
70°-80°	333.9	3.4
80°-90°	96.3	1.0
90°-100°	446.7	4.5
100°-110°	1174.3	11.8
110°-120°	1217.6	12.2
120°-130°	976.7	9.8
130°-140°	766.3	7.7
140°-150°	588.2	5.9
150°-160°	423.6	4.3
160°-170°	259.2	2.6
170°-180°	87.6	0.9
0°-30°	884.9	8.9
0°-40°	1554.7	15.6
0°-60°	3019.5	30.3
0°-90°	4017.6	40.3
90°-120°	2838.6	28.5
90°-150°	5169.8	51.9
90°-180°	5940.0	59.7
0°-180°	9957.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	506	542	611	691	716	47
15°	379	699	1178	1428	1473	105
25°	242	792	1403	1465	1467	111
35°	164	757	1321	1396	1452	102
45°	112	604	1168	1338	1398	86
55°	80	384	991	1151	1183	73
65°	63	204	736	828	839	63
75°	47	125	404	444	446	49
85°	17	38	100	110	112	18
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	

TEST NUMBER: P938583

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8
2.5°	518.8	518.8	522.2	523.9	527.2	528.9	532.2	535.6	545.6	547.2	550.6
5°	505.5	512.2	533.9	542.2	565.6	597.3	610.6	632.3	677.4	690.7	699.1
7.5°	485.5	500.5	553.9	567.2	625.6	709.0	744.1	790.9	862.6	897.6	926.0
10°	453.8	485.5	580.6	612.3	707.4	834.2	899.2	964.3	1072.8	1121.2	1139.5
12.5°	418.8	470.5	609.0	652.3	789.2	974.4	1052.8	1124.5	1248.0	1313.1	1323.0
15°	378.7	448.8	635.7	699.1	875.9	1091.1	1177.9	1266.3	1381.5	1428.1	1439.9
17.5°	343.7	432.2	660.7	727.5	942.6	1196.2	1284.7	1358.1	1451.5	1483.2	1491.5
20°	300.3	405.4	677.4	764.2	1012.7	1273.0	1358.1	1414.8	1478.2	1498.2	1501.6
22.5°	268.6	377.0	687.3	777.5	1059.5	1319.7	1391.4	1436.5	1479.9	1486.6	1488.2
25°	242.0	345.4	685.8	792.4	1099.5	1348.1	1403.2	1436.5	1461.5	1464.9	1464.9
27.5°	216.9	310.3	679.1	795.8	1129.5	1354.8	1398.1	1421.5	1433.2	1439.9	1439.9
30°	195.2	277.0	662.4	789.2	1142.9	1348.1	1383.1	1394.8	1406.4	1416.5	1421.5
32.5°	178.6	245.2	637.4	775.8	1144.5	1331.4	1356.4	1363.0	1379.8	1403.2	1411.5
35°	163.5	213.6	609.0	757.4	1134.5	1304.7	1321.3	1328.0	1361.4	1396.5	1408.1
37.5°	148.5	190.2	572.3	725.8	1119.5	1273.0	1284.7	1296.4	1348.1	1389.8	1403.2
40°	133.5	170.2	528.9	690.7	1096.1	1234.6	1244.6	1263.0	1331.4	1379.8	1393.1
42.5°	121.8	153.5	482.2	654.0	1066.1	1191.3	1206.3	1233.0	1311.4	1363.0	1378.1
45°	111.8	136.9	432.2	603.9	1027.7	1146.2	1167.9	1204.6	1288.0	1338.1	1351.4
47.5°	101.8	125.1	380.4	552.3	986.0	1101.2	1129.5	1171.3	1256.3	1304.7	1316.4
50°	93.5	113.5	328.6	497.1	940.9	1052.8	1086.2	1129.5	1216.2	1261.3	1276.4
52.5°	86.8	103.4	280.3	442.1	889.3	1002.7	1041.1	1086.2	1167.9	1211.3	1221.3
55°	80.1	95.1	238.6	383.8	835.8	949.3	991.0	1034.4	1114.5	1151.2	1157.9
57.5°	76.7	88.4	203.5	328.6	779.1	889.3	936.0	976.0	1051.1	1079.5	1086.2
60°	71.8	83.4	176.9	282.0	717.4	832.6	872.6	912.6	976.0	999.4	1004.3
62.5°	66.8	80.1	156.9	236.9	654.0	765.8	805.9	842.5	896.0	912.6	919.2
65°	63.4	76.7	141.8	203.5	588.9	695.7	735.8	767.5	810.9	827.5	830.9
67.5°	60.0	73.5	130.2	175.2	523.9	625.6	655.7	685.8	719.1	735.8	737.4
70°	55.0	70.1	120.1	155.2	457.1	545.6	570.6	602.2	629.0	637.4	642.4
72.5°	51.8	65.1	113.5	140.1	388.8	468.8	492.2	510.6	533.9	542.2	542.2
75°	46.7	58.4	106.8	125.1	318.7	383.8	403.8	422.1	440.4	443.8	438.8
77.5°	41.7	51.8	91.8	105.1	248.6	303.7	320.4	330.3	345.4	348.6	350.3
80°	35.0	45.1	71.8	81.7	180.1	223.5	235.3	243.5	257.0	257.0	260.3
82.5°	26.7	35.0	51.8	58.4	121.8	153.5	163.5	168.5	176.9	176.9	176.9
85°	16.7	21.7	33.3	38.4	73.5	93.5	100.1	101.8	108.5	110.1	110.1
87.5°	8.4	11.6	21.7	23.4	38.4	48.4	48.4	51.8	51.8	50.1	48.4
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: P938583

CATALOG NUMBER: SQ4-FB-150U-125D-B2750-1D-UNV-W2A-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°	518.8	518.8
2.5°	553.9	550.6
5°	712.4	715.7
7.5°	959.4	957.7
10°	1192.9	1207.9
12.5°	1363.0	1366.4
15°	1466.6	1473.2
17.5°	1506.6	1508.3
20°	1508.3	1504.9
22.5°	1489.8	1486.6
25°	1468.2	1466.6
27.5°	1448.1	1449.8
30°	1439.9	1444.9
32.5°	1439.9	1448.1
35°	1443.2	1451.5
37.5°	1441.5	1451.5
40°	1434.8	1446.5
42.5°	1416.5	1424.8
45°	1388.1	1398.1
47.5°	1351.4	1358.1
50°	1304.7	1311.4
52.5°	1246.3	1248.0
55°	1176.2	1182.9
57.5°	1101.2	1102.8
60°	1017.7	1022.8
62.5°	929.3	929.3
65°	835.8	839.2
67.5°	739.1	747.5
70°	640.7	642.4
72.5°	543.9	543.9
75°	443.8	445.5
77.5°	348.6	348.6
80°	258.6	260.3
82.5°	178.6	181.8
85°	111.8	111.8
87.5°	51.8	46.7
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	5.50	6.31	6.53	7.35	8.75	18.64	19.45	19.67	20.49	21.89
	3H	6.20	6.93	7.24	7.98	9.40	20.46	21.19	21.50	22.24	23.65
	4H	6.50	7.19	7.55	8.24	9.67	21.09	21.78	22.14	22.83	24.26
	6H	6.75	7.38	7.81	8.44	9.88	21.51	22.14	22.57	23.20	24.64
	8H	6.81	7.42	7.88	8.49	9.93	21.62	22.23	22.68	23.30	24.73
	12H	6.83	7.41	7.90	8.47	9.93	21.68	22.25	22.75	23.32	24.78
4H	2H	12.68	13.37	13.74	14.43	15.85	18.91	19.60	19.97	20.65	22.08
	3H	14.25	14.83	15.31	15.91	17.35	20.93	21.51	22.00	22.59	24.03
	4H	14.34	14.87	15.41	15.94	17.40	21.69	22.22	22.76	23.29	24.75
	6H	14.35	14.81	15.43	15.90	17.35	22.21	22.67	23.29	23.76	25.22
	8H	14.33	14.75	15.41	15.84	17.31	22.37	22.79	23.45	23.88	25.35
	12H	14.28	14.67	15.38	15.77	17.24	22.45	22.83	23.55	23.93	25.41
8H	4H	15.77	16.20	16.85	17.28	18.76	21.75	22.17	22.83	23.26	24.73
	6H	16.01	16.37	17.12	17.49	18.96	22.36	22.71	23.46	23.84	25.31
	8H	16.03	16.34	17.14	17.45	18.94	22.57	22.88	23.68	23.99	25.48
	12H	16.00	16.27	17.11	17.37	18.90	22.70	22.98	23.82	24.08	25.61
12H	4H	15.91	16.30	17.01	17.40	18.87	21.70	22.08	22.79	23.18	24.66
	6H	16.27	16.58	17.38	17.69	19.17	22.34	22.65	23.45	23.76	25.25
	8H	16.33	16.61	17.45	17.71	19.24	22.56	22.83	23.68	23.94	25.47