

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: P937262

Luminaire Tested: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937262
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

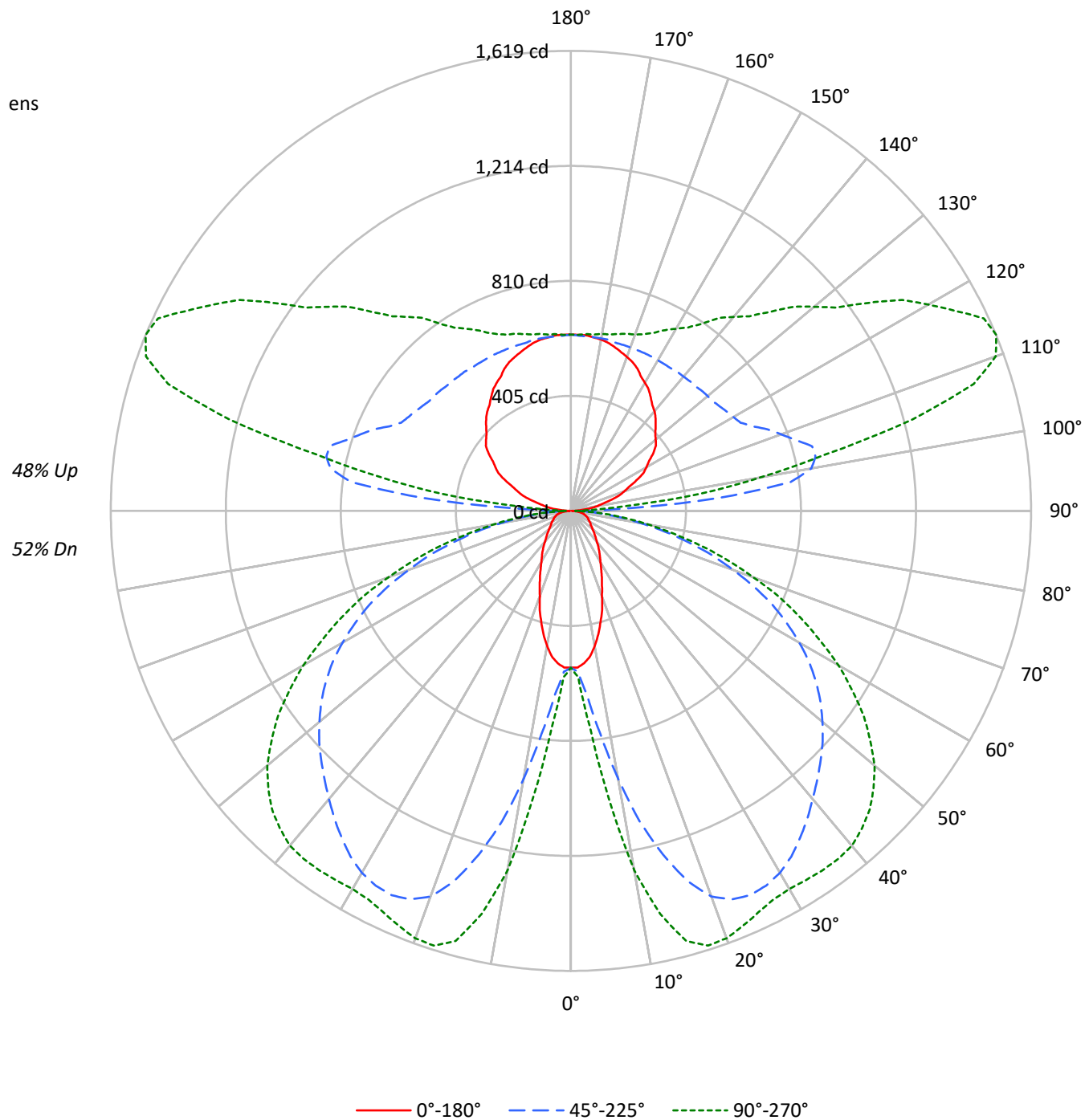
Lumens per Lamp: N/A
Luminaire Lumens: 8292.4 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 76.8
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

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3414	3414	3414
5°	3334	3944	4588
10°	3023	5749	7607
15°	2568	7508	9185
20°	2090	8699	9361
25°	1743	9101	9171
30°	1469	9156	9153
35°	1298	9002	9391
40°	1130	8801	9635
45°	1023	8654	9672
50°	938	8521	9512
55°	896	8328	9091
60°	918	7958	8425
65°	953	7398	7510
70°	1013	6447	6344
75°	1118	5253	4951
80°	1211	3639	3336
85°	1055	1928	1708

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9672 cd/sqm

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.4	0.9
10°-20°	316.4	3.8
20°-30°	553.4	6.7
30°-40°	712.3	8.6
40°-50°	795.7	9.6
50°-60°	762.1	9.2
60°-70°	603.9	7.3
70°-80°	355.1	4.3
80°-90°	101.0	1.2
90°-100°	302.4	3.6
100°-110°	794.9	9.6
110°-120°	824.3	9.9
120°-130°	661.2	8.0
130°-140°	518.8	6.3
140°-150°	398.2	4.8
150°-160°	286.8	3.5
160°-170°	175.5	2.1
170°-180°	59.3	0.7
0°-30°	941.1	11.3
0°-40°	1653.4	19.9
0°-60°	3211.1	38.7
0°-90°	4271.2	51.5
90°-120°	1921.6	23.2
90°-150°	3499.7	42.2
90°-180°	4021.0	48.5
0°-180°	8292.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	538	577	649	735	761	50
15°	403	744	1253	1519	1567	112
25°	257	843	1492	1558	1560	119
35°	174	806	1405	1485	1544	109
45°	119	642	1242	1423	1487	92
55°	85	408	1054	1224	1258	78
65°	67	216	782	880	892	67
75°	50	133	429	472	474	52
85°	18	41	106	117	119	19
90°	4	12	32	16	16	5
95°	40	156	521	268	183	44
105°	143	217	879	1334	1245	152
115°	254	309	704	1404	1603	251
125°	354	397	640	1082	1276	314
135°	422	464	620	873	990	326
145°	489	520	612	745	804	306
155°	553	568	612	672	692	254
165°	596	604	612	637	644	168
175°	620	620	616	624	624	59
180°	620	620	620	620	620	

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8	551.8
2.5°	551.8	551.8	555.4	557.2	560.6	562.4	566.0	569.6	580.2	582.0	585.5
5°	537.6	544.7	567.8	576.7	601.5	635.2	649.4	672.5	720.4	734.6	743.5
7.5°	516.3	532.3	589.1	603.3	665.4	754.1	791.4	841.1	917.3	954.6	984.8
10°	482.6	516.3	617.5	651.2	752.3	887.2	956.4	1025.6	1140.9	1192.4	1211.9
12.5°	445.3	500.4	647.7	693.8	839.3	1036.2	1119.6	1195.9	1327.2	1396.4	1407.1
15°	402.8	477.3	676.1	743.5	931.5	1160.4	1252.7	1346.7	1469.1	1518.8	1531.3
17.5°	365.6	459.6	702.6	773.6	1002.5	1272.2	1366.2	1444.3	1543.7	1577.4	1586.2
20°	319.4	431.2	720.4	812.7	1077.1	1353.8	1444.3	1504.7	1572.1	1593.4	1596.9
22.5°	285.7	401.0	731.0	826.8	1126.7	1403.5	1479.8	1527.7	1573.9	1580.9	1582.7
25°	257.3	367.3	729.2	842.8	1169.3	1433.7	1492.2	1527.7	1554.4	1557.8	1557.8
27.5°	230.6	330.0	722.2	846.3	1201.2	1440.7	1486.8	1511.7	1524.2	1531.3	1531.3
30°	207.6	294.6	704.4	839.3	1215.4	1433.7	1470.9	1483.4	1495.8	1506.4	1511.7
32.5°	189.9	260.8	677.8	825.0	1217.2	1415.9	1442.5	1449.6	1467.3	1492.2	1501.1
35°	173.9	227.1	647.7	805.5	1206.5	1387.6	1405.3	1412.4	1447.8	1485.1	1497.5
37.5°	157.9	202.3	608.6	771.8	1190.6	1353.8	1366.2	1378.7	1433.7	1478.0	1492.2
40°	141.9	180.9	562.4	734.6	1165.7	1313.0	1323.6	1343.1	1415.9	1467.3	1481.6
42.5°	129.6	163.2	512.7	695.6	1133.8	1266.9	1282.8	1311.2	1394.6	1449.6	1465.6
45°	118.9	145.5	459.6	642.3	1093.0	1219.0	1242.1	1281.1	1369.7	1423.0	1437.2
47.5°	108.2	133.0	404.6	587.3	1048.6	1171.1	1201.2	1245.6	1336.1	1387.6	1399.9
50°	99.4	120.7	349.5	528.8	1000.7	1119.6	1155.1	1201.2	1293.5	1341.4	1357.4
52.5°	92.3	110.0	298.0	470.2	945.7	1066.4	1107.1	1155.1	1242.1	1288.2	1298.8
55°	85.1	101.2	253.7	408.1	889.0	1009.6	1054.0	1100.1	1185.2	1224.2	1231.4
57.5°	81.7	94.0	216.5	349.5	828.6	945.7	995.4	1038.0	1117.8	1148.0	1155.1
60°	76.3	88.7	188.1	299.8	763.0	885.4	928.0	970.5	1038.0	1062.8	1068.1
62.5°	71.0	85.1	166.8	251.9	695.6	814.4	857.0	896.0	952.8	970.5	977.7
65°	67.4	81.7	150.9	216.5	626.4	739.9	782.5	816.2	862.4	880.1	883.6
67.5°	63.8	78.1	138.4	186.3	557.2	665.4	697.3	729.2	764.8	782.5	784.3
70°	58.6	74.5	127.8	165.0	486.2	580.2	606.8	640.5	668.9	677.8	683.1
72.5°	55.0	69.2	120.7	149.1	413.5	498.6	523.4	542.9	567.8	576.7	576.7
75°	49.7	62.1	113.5	133.0	338.9	408.1	429.4	448.9	468.4	472.0	466.6
77.5°	44.3	55.0	97.6	111.8	264.4	322.9	340.7	351.3	367.3	370.8	372.6
80°	37.2	47.9	76.3	86.9	191.6	237.8	250.2	259.0	273.2	273.2	276.8
82.5°	28.4	37.2	55.0	62.1	129.6	163.2	173.9	179.2	188.1	188.1	188.1
85°	17.7	23.1	35.5	40.8	78.1	99.4	106.5	108.2	115.3	117.1	117.1
87.5°	8.9	12.4	23.1	24.8	40.8	51.5	51.5	55.0	55.0	53.3	51.5
90°	4.1	7.4	10.8	11.6	18.3	27.1	31.6	28.1	21.1	15.8	15.8
92.5°	16.7	44.9	73.2	80.3	112.9	156.4	178.2	156.1	112.1	79.1	75.9
95°	39.9	91.8	143.5	156.5	277.9	439.9	520.8	464.8	352.6	268.5	259.0
97.5°	69.1	114.8	160.4	171.9	374.4	644.4	779.4	743.9	673.1	619.9	601.7
100°	91.6	133.0	174.5	184.9	409.5	709.1	858.9	861.5	866.7	870.5	848.9
102.5°	110.8	149.4	188.1	197.8	425.6	729.4	881.3	926.5	1016.8	1084.5	1066.0
105°	143.2	176.0	208.8	216.9	437.5	731.7	878.8	980.0	1182.4	1334.3	1324.3
107.5°	176.6	207.1	237.6	245.2	439.8	699.1	828.9	970.1	1252.5	1464.2	1466.6
110°	199.0	226.6	254.1	261.0	436.4	670.3	787.2	945.1	1260.8	1497.5	1507.9

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	221.1	247.3	273.6	280.1	436.6	645.1	749.4	910.9	1233.9	1476.2	1492.1
115°	254.4	278.6	302.8	308.9	440.6	616.2	704.0	859.6	1170.8	1404.2	1426.2
117.5°	287.2	309.2	331.3	336.8	448.8	598.1	672.7	813.2	1094.1	1304.7	1329.2
120°	306.4	327.1	347.8	353.0	455.4	592.0	660.3	788.6	1045.2	1237.7	1261.5
122.5°	325.2	346.0	367.0	372.2	465.0	588.8	650.7	766.2	997.3	1170.6	1194.1
125°	353.8	372.9	392.0	396.7	477.9	586.2	640.3	738.5	934.8	1082.0	1103.6
127.5°	377.2	396.4	415.6	420.4	490.8	584.6	631.6	715.8	884.4	1010.8	1029.1
130°	389.6	410.4	431.1	436.3	500.3	585.6	628.2	703.3	853.3	965.9	982.7
132.5°	402.5	423.3	444.0	449.2	507.9	586.2	625.3	692.4	826.8	927.5	942.6
135°	421.7	440.6	459.5	464.2	516.2	585.6	620.3	676.5	789.0	873.4	886.4
137.5°	441.3	459.9	478.6	483.3	528.7	589.2	619.5	667.0	762.1	833.4	844.1
140°	457.5	474.7	492.0	496.3	536.4	589.8	616.5	657.6	739.8	801.4	811.3
142.5°	470.0	486.0	501.9	505.9	542.7	591.9	616.5	652.6	724.8	778.9	787.5
145°	489.2	503.1	516.9	520.4	551.1	592.0	612.4	641.9	700.9	745.2	751.6
147.5°	508.3	521.8	535.3	538.7	563.2	596.0	612.4	635.6	682.0	716.9	722.2
150°	520.8	533.0	545.2	548.3	569.7	598.2	612.4	632.0	671.2	700.7	705.1
152.5°	533.7	543.0	552.2	554.6	573.8	599.5	612.4	629.1	662.6	687.8	691.1
155°	552.9	559.7	566.6	568.3	582.9	602.5	612.4	625.7	652.4	672.4	674.5
157.5°	567.0	573.7	580.3	582.0	592.2	605.7	612.4	622.8	643.5	659.0	660.6
160°	576.6	581.8	587.0	588.2	596.3	607.0	612.4	621.3	639.0	652.3	653.2
162.5°	586.2	590.1	593.9	594.9	600.8	608.5	612.4	619.9	634.9	646.1	647.0
165°	596.5	600.1	603.6	604.5	607.1	610.6	612.4	617.8	628.5	636.6	637.5
167.5°	606.1	607.8	609.4	609.9	612.1	615.1	616.5	620.0	627.1	632.4	632.7
170°	612.4	614.1	615.7	616.2	616.2	616.4	616.5	620.0	627.1	632.4	632.4
172.5°	615.7	616.1	616.4	616.5	616.5	616.5	616.5	619.3	624.8	629.0	628.7
175°	620.3	620.3	620.3	620.3	619.0	617.3	616.5	618.3	621.8	624.5	624.5
177.5°	620.3	620.3	620.3	620.3	619.3	618.0	617.4	618.8	621.6	623.7	623.3
180°	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3	620.3

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	551.8	551.8
2.5°	589.1	585.5
5°	757.6	761.2
7.5°	1020.2	1018.5
10°	1268.7	1284.6
12.5°	1449.6	1453.2
15°	1559.6	1566.7
17.5°	1602.3	1604.0
20°	1604.0	1600.5
22.5°	1584.4	1580.9
25°	1561.4	1559.6
27.5°	1540.1	1541.9
30°	1531.3	1536.5
32.5°	1531.3	1540.1
35°	1534.8	1543.7
37.5°	1533.0	1543.7
40°	1525.9	1538.3
42.5°	1506.4	1515.3
45°	1476.3	1486.8
47.5°	1437.2	1444.3
50°	1387.6	1394.6
52.5°	1325.4	1327.2
55°	1250.9	1258.0
57.5°	1171.1	1172.9
60°	1082.3	1087.6
62.5°	988.3	988.3
65°	889.0	892.4
67.5°	786.0	794.9
70°	681.3	683.1
72.5°	578.5	578.5
75°	472.0	473.7
77.5°	370.8	370.8
80°	275.0	276.8
82.5°	189.9	193.4
85°	118.9	118.9
87.5°	55.0	49.7
90°	15.8	15.8
92.5°	63.3	50.8
95°	220.9	182.7
97.5°	529.2	456.7
100°	762.4	676.1
102.5°	992.0	918.0
105°	1284.5	1244.8
107.5°	1476.2	1485.8
110°	1549.2	1590.7

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1555.8	1619.4
115°	1514.5	1602.8
117.5°	1427.0	1524.9
120°	1356.6	1451.7
122.5°	1287.9	1381.7
125°	1190.0	1276.4
127.5°	1102.0	1174.8
130°	1050.0	1117.3
132.5°	1002.9	1063.3
135°	938.4	990.4
137.5°	886.6	929.2
140°	851.2	890.9
142.5°	821.7	855.9
145°	777.6	803.5
147.5°	743.6	765.1
150°	722.4	739.8
152.5°	704.2	717.3
155°	683.2	691.9
157.5°	666.6	672.7
160°	656.7	660.3
162.5°	650.3	653.6
165°	641.0	644.4
167.5°	634.2	635.7
170°	632.4	632.4
172.5°	627.4	626.1
175°	624.5	624.5
177.5°	621.8	620.3
180°	620.3	620.3

TEST NUMBER: P937262

CATALOG NUMBER: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-6-3500K

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	5.40	6.32	6.34	7.28	8.52	18.57	19.48	19.50	20.44	21.69
	3H	6.11	6.94	7.06	7.90	9.17	20.41	21.23	21.35	22.20	23.47
	4H	6.41	7.19	7.38	8.17	9.44	21.05	21.83	22.01	22.80	24.08
	6H	6.67	7.39	7.64	8.36	9.66	21.48	22.20	22.45	23.18	24.47
	8H	6.74	7.42	7.72	8.42	9.71	21.60	22.29	22.58	23.28	24.57
	12H	6.76	7.41	7.74	8.40	9.71	21.67	22.32	22.65	23.31	24.62
4H	2H	12.62	13.40	13.58	14.37	15.65	18.85	19.63	19.82	20.60	21.88
	3H	14.19	14.84	15.17	15.85	17.14	20.90	21.55	21.87	22.55	23.84
	4H	14.29	14.89	15.27	15.88	17.20	21.66	22.26	22.65	23.25	24.57
	6H	14.30	14.82	15.30	15.84	17.15	22.20	22.72	23.20	23.73	25.05
	8H	14.28	14.76	15.28	15.77	17.10	22.36	22.84	23.36	23.86	25.18
	12H	14.24	14.68	15.26	15.70	17.04	22.45	22.89	23.47	23.92	25.25
8H	4H	15.73	16.22	16.73	17.23	18.56	21.73	22.21	22.73	23.22	24.55
	6H	15.98	16.38	17.00	17.43	18.76	22.35	22.75	23.38	23.81	25.13
	8H	16.00	16.35	17.03	17.39	18.74	22.57	22.93	23.61	23.96	25.31
	12H	15.97	16.28	17.01	17.31	18.70	22.72	23.03	23.75	24.06	25.45
12H	4H	15.88	16.32	16.90	17.34	18.68	21.68	22.12	22.70	23.15	24.48
	6H	16.24	16.59	17.27	17.63	18.97	22.34	22.69	23.37	23.73	25.08
	8H	16.31	16.62	17.35	17.65	19.04	22.57	22.88	23.61	23.91	25.30