

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: P936591

Luminaire Tested: SQ4-FB-025U-125D-B2750-1D-UNV-W2A-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936591
REPORT IS A COMBINATION OF REPORTS P933448 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-B2750-1D-UNV-W2A-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

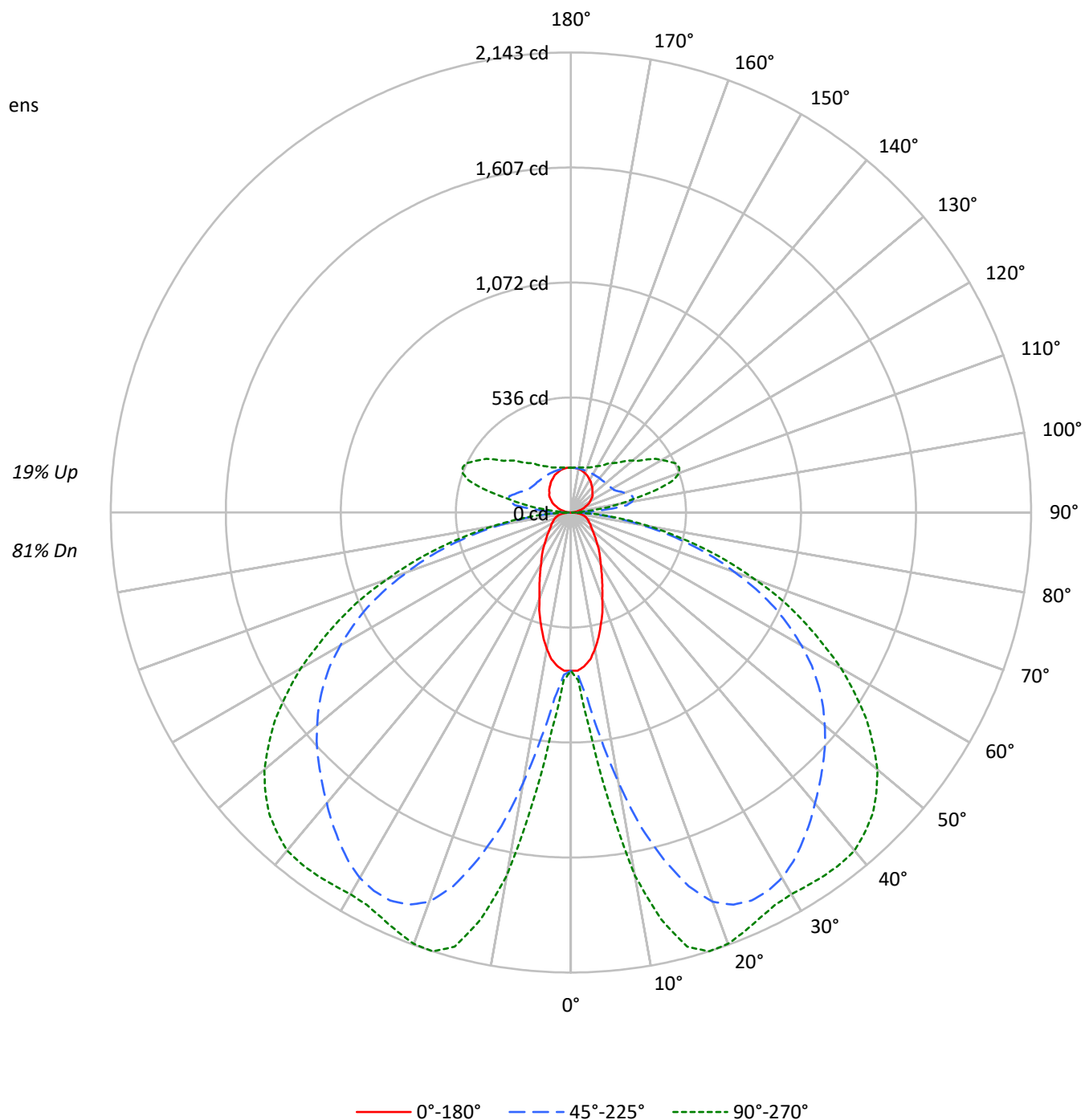
Lumens per Lamp: N/A
Luminaire Lumens: 7060.1 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.4
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

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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	114	114	114	114	110	110	110	110	100	100	100		92	92	92		84
1	104	99	94	90	99	95	91	87	87	84	81		80	77	75		73
2	94	85	78	72	89	82	75	70	75	70	66		69	65	61		63
3	85	74	66	59	81	71	64	58	65	59	54		60	55	51		55
4	77	65	56	49	74	63	54	48	58	51	45		53	47	43		49
5	71	58	49	42	67	55	47	41	51	44	39		47	41	36		43
6	65	51	42	36	62	49	41	35	46	39	33		42	36	31		39
7	60	46	37	31	57	45	36	30	41	34	29		38	32	27		35
8	55	42	33	27	53	40	32	27	37	30	25		35	29	24		32
9	52	38	30	24	49	37	29	24	34	27	23		32	26	22		29
10	48	35	27	22	46	34	26	21	31	25	20		29	23	19		27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4454	5270	6131
10°	4039	7681	10164
15°	3432	10033	12274
20°	2792	11623	12508
25°	2329	12160	12254
30°	1963	12234	12231
35°	1735	12027	12547
40°	1511	11760	12874
45°	1367	11563	12924
50°	1252	11385	12710
55°	1199	11127	12147
60°	1225	10634	11257
65°	1273	9885	10035
70°	1354	8615	8478
75°	1494	7019	6616
80°	1621	4862	4458
85°	1413	2574	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	1.4
10°-20°	422.7	6.0
20°-30°	739.4	10.5
30°-40°	951.8	13.5
40°-50°	1063.1	15.1
50°-60°	1018.2	14.4
60°-70°	807.0	11.4
70°-80°	474.5	6.7
80°-90°	132.6	1.9
90°-100°	101.9	1.4
100°-110°	267.9	3.8
110°-120°	277.8	3.9
120°-130°	222.9	3.2
130°-140°	174.9	2.5
140°-150°	134.2	1.9
150°-160°	96.7	1.4
160°-170°	59.1	0.8
170°-180°	20.0	0.3
0°-30°	1257.5	17.8
0°-40°	2209.3	31.3
0°-60°	4290.6	60.8
0°-90°	5704.7	80.8
90°-120°	647.6	9.2
90°-150°	1179.6	16.7
90°-180°	1355.0	19.2
0°-180°	7060.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	718	771	868	982	1017	66
15°	538	993	1674	2029	2094	150
25°	344	1126	1994	2082	2084	158
35°	232	1076	1878	1984	2063	145
45°	159	858	1660	1901	1987	123
55°	114	545	1408	1636	1681	104
65°	90	289	1046	1176	1192	89
75°	66	178	574	631	633	70
85°	24	54	142	156	159	25
90°	1	4	11	5	5	3
95°	13	53	176	90	62	15
105°	48	73	296	450	420	51
115°	86	104	237	473	540	85
125°	119	134	216	365	430	106
135°	142	156	209	294	334	110
145°	165	175	206	251	271	103
155°	186	192	206	227	233	86
165°	201	204	206	214	217	57
175°	209	209	208	210	210	20
180°	209	209	209	209	209	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3
2.5°	737.3	737.3	742.1	744.4	749.2	751.6	756.3	761.0	775.2	777.6	782.4
5°	718.3	727.9	758.7	770.6	803.7	848.7	867.7	898.5	962.6	981.5	993.4
7.5°	689.9	711.2	787.1	806.0	889.1	1007.6	1057.4	1123.8	1225.7	1275.5	1315.8
10°	644.8	689.9	825.0	870.1	1005.3	1185.4	1277.9	1370.4	1524.5	1593.2	1619.3
12.5°	595.1	668.6	865.4	927.0	1121.4	1384.6	1496.0	1597.9	1773.4	1865.9	1880.0
15°	538.2	637.7	903.3	993.4	1244.6	1550.5	1673.8	1799.4	1963.1	2029.4	2046.0
17.5°	488.4	614.0	938.9	1033.7	1339.5	1699.9	1825.5	1929.8	2062.6	2107.7	2119.5
20°	426.7	576.1	962.6	1085.9	1439.1	1809.0	1929.8	2010.4	2100.6	2129.0	2133.7
22.5°	381.7	535.8	976.8	1104.8	1505.5	1875.3	1977.3	2041.3	2102.9	2112.4	2114.8
25°	343.8	490.7	974.4	1126.1	1562.4	1915.6	1993.9	2041.3	2076.8	2081.6	2081.6
27.5°	308.2	440.9	964.9	1130.9	1605.1	1925.1	1986.7	2020.0	2036.5	2046.0	2046.0
30°	277.4	393.6	941.2	1121.4	1624.0	1915.6	1965.4	1982.0	1998.6	2012.9	2020.0
32.5°	253.7	348.5	905.6	1102.4	1626.4	1891.9	1927.5	1936.9	1960.7	1993.9	2005.7
35°	232.4	303.5	865.4	1076.3	1612.2	1854.0	1877.7	1887.1	1934.6	1984.4	2001.0
37.5°	211.0	270.3	813.2	1031.3	1590.8	1809.0	1825.5	1842.1	1915.6	1974.8	1993.9
40°	189.7	241.8	751.6	981.5	1557.6	1754.4	1768.6	1794.7	1891.9	1960.7	1979.6
42.5°	173.1	218.1	685.2	929.3	1514.9	1692.8	1714.1	1752.0	1863.4	1936.9	1958.3
45°	158.9	194.4	614.0	858.3	1460.4	1628.7	1659.5	1711.7	1830.3	1901.4	1920.4
47.5°	144.6	177.8	540.5	784.7	1401.2	1564.7	1605.1	1664.3	1785.2	1854.0	1870.6
50°	132.7	161.2	467.1	706.5	1337.1	1496.0	1543.4	1605.1	1728.4	1792.3	1813.6
52.5°	123.3	147.0	398.3	628.3	1263.6	1424.8	1479.4	1543.4	1659.5	1721.2	1735.5
55°	113.8	135.1	339.0	545.3	1187.8	1349.0	1408.3	1469.9	1583.7	1635.9	1645.3
57.5°	109.1	125.6	289.3	467.1	1107.2	1263.6	1330.0	1386.9	1493.7	1533.9	1543.4
60°	101.9	118.5	251.3	400.7	1019.5	1183.0	1240.0	1296.9	1386.9	1420.1	1427.2
62.5°	94.8	113.8	222.9	336.6	929.3	1088.2	1145.1	1197.3	1273.1	1296.9	1306.3
65°	90.1	109.1	201.6	289.3	836.9	988.6	1045.5	1090.5	1152.2	1175.9	1180.7
67.5°	85.4	104.3	184.9	248.9	744.4	889.1	931.8	974.4	1021.8	1045.5	1047.9
70°	78.3	99.6	170.7	220.5	649.6	775.2	810.8	855.8	893.8	905.6	912.8
72.5°	73.5	92.5	161.2	199.1	552.4	666.2	699.4	725.4	758.7	770.6	770.6
75°	66.4	82.9	151.8	177.8	452.8	545.3	573.8	599.8	625.9	630.6	623.5
77.5°	59.3	73.5	130.4	149.3	353.2	431.5	455.2	469.4	490.7	495.5	497.9
80°	49.8	64.0	101.9	116.2	256.0	317.7	334.3	346.1	365.1	365.1	369.9
82.5°	37.9	49.8	73.5	82.9	173.1	218.1	232.4	239.5	251.3	251.3	251.3
85°	23.7	30.8	47.4	54.5	104.3	132.7	142.2	144.6	154.1	156.4	156.4
87.5°	11.9	16.6	30.8	33.2	54.5	68.7	68.7	73.5	73.5	71.2	68.7
90°	1.4	2.5	3.6	3.9	6.2	9.2	10.6	9.4	7.1	5.3	5.3
92.5°	5.6	15.1	24.7	27.1	38.1	52.8	60.1	52.6	37.7	26.6	25.6
95°	13.4	30.9	48.4	52.8	93.7	148.2	175.5	156.6	118.8	90.5	87.3
97.5°	23.3	38.7	54.1	57.9	126.2	217.2	262.6	250.7	226.9	208.9	202.9
100°	30.9	44.8	58.8	62.3	138.0	239.0	289.4	290.3	292.1	293.4	286.1
102.5°	37.4	50.4	63.4	66.7	143.5	245.8	297.0	312.2	342.7	365.6	359.3
105°	48.3	59.3	70.3	73.1	147.5	246.6	296.2	330.3	398.5	449.7	446.4
107.5°	59.5	69.8	80.0	82.7	148.2	235.6	279.4	327.0	422.2	493.5	494.4
110°	67.1	76.4	85.6	88.0	147.1	225.9	265.3	318.6	425.0	504.7	508.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	74.5	83.4	92.2	94.4	147.1	217.4	252.6	307.0	415.9	497.5	502.9
115°	85.7	94.0	102.1	104.1	148.5	207.6	237.2	289.7	394.6	473.3	480.7
117.5°	96.9	104.2	111.6	113.5	151.2	201.6	226.8	274.1	368.7	439.7	447.9
120°	103.3	110.3	117.2	119.0	153.5	199.6	222.6	265.8	352.3	417.2	425.3
122.5°	109.6	116.7	123.7	125.4	156.7	198.5	219.3	258.3	336.1	394.6	402.6
125°	119.3	125.7	132.2	133.7	161.1	197.6	215.8	248.9	315.1	364.7	372.0
127.5°	127.1	133.6	140.1	141.7	165.4	197.1	212.9	241.3	298.1	340.7	346.9
130°	131.3	138.3	145.2	147.0	168.6	197.4	211.7	237.0	287.6	325.5	331.2
132.5°	135.7	142.7	149.6	151.4	171.2	197.6	210.8	233.4	278.7	312.6	317.7
135°	142.2	148.5	154.9	156.4	174.0	197.4	209.1	228.1	266.0	294.4	298.8
137.5°	148.8	155.0	161.3	162.9	178.2	198.7	208.8	224.9	256.9	280.9	284.5
140°	154.2	160.0	165.8	167.3	180.8	198.8	207.8	221.6	249.4	270.1	273.5
142.5°	158.4	163.7	169.1	170.5	182.9	199.5	207.8	220.0	244.3	262.5	265.4
145°	164.9	169.5	174.2	175.4	185.8	199.5	206.4	216.3	236.2	251.2	253.3
147.5°	171.3	175.9	180.4	181.6	189.9	200.9	206.4	214.3	229.9	241.6	243.4
150°	175.5	179.6	183.8	184.8	192.0	201.7	206.4	213.0	226.2	236.1	237.6
152.5°	179.9	183.0	186.1	186.9	193.4	202.1	206.4	212.0	223.3	231.8	232.9
155°	186.3	188.7	191.0	191.6	196.5	203.1	206.4	210.9	219.9	226.6	227.3
157.5°	191.1	193.3	195.6	196.1	199.6	204.2	206.4	209.9	216.9	222.1	222.7
160°	194.4	196.1	197.8	198.3	201.0	204.6	206.4	209.4	215.4	219.9	220.1
162.5°	197.5	198.8	200.2	200.5	202.5	205.1	206.4	208.9	214.0	217.8	218.1
165°	201.1	202.2	203.4	203.7	204.6	205.9	206.4	208.2	211.8	214.5	214.8
167.5°	204.3	204.8	205.4	205.6	206.3	207.3	207.8	209.0	211.4	213.1	213.2
170°	206.4	207.0	207.5	207.6	207.7	207.8	207.8	209.0	211.4	213.1	213.1
172.5°	207.5	207.6	207.8	207.8	207.8	207.8	207.8	208.7	210.6	212.0	211.9
175°	209.1	209.1	209.1	209.1	208.7	208.1	207.8	208.4	209.6	210.5	210.5
177.5°	209.1	209.1	209.1	209.1	208.7	208.3	208.1	208.6	209.5	210.2	210.2
180°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	737.3	737.3
2.5°	787.1	782.4
5°	1012.4	1017.1
7.5°	1363.3	1360.8
10°	1695.1	1716.5
12.5°	1936.9	1941.7
15°	2083.9	2093.5
17.5°	2140.8	2143.2
20°	2143.2	2138.5
22.5°	2117.1	2112.4
25°	2086.3	2083.9
27.5°	2057.9	2060.2
30°	2046.0	2053.1
32.5°	2046.0	2057.9
35°	2050.8	2062.6
37.5°	2048.4	2062.6
40°	2038.9	2055.5
42.5°	2012.9	2024.7
45°	1972.5	1986.7
47.5°	1920.4	1929.8
50°	1854.0	1863.4
52.5°	1771.0	1773.4
55°	1671.4	1680.9
57.5°	1564.7	1567.1
60°	1446.2	1453.3
62.5°	1320.6	1320.6
65°	1187.8	1192.5
67.5°	1050.3	1062.1
70°	910.4	912.8
72.5°	772.9	772.9
75°	630.6	633.0
77.5°	495.5	495.5
80°	367.4	369.9
82.5°	253.7	258.4
85°	158.9	158.9
87.5°	73.5	66.4
90°	5.3	5.3
92.5°	21.3	17.1
95°	74.4	61.6
97.5°	178.4	153.9
100°	257.0	227.9
102.5°	334.4	309.4
105°	433.0	419.6
107.5°	497.5	500.8
110°	522.2	536.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	524.3	545.8
115°	510.4	540.2
117.5°	481.0	514.0
120°	457.3	489.3
122.5°	434.1	465.7
125°	401.1	430.2
127.5°	371.5	396.0
130°	353.9	376.6
132.5°	338.0	358.4
135°	316.3	333.8
137.5°	298.9	313.2
140°	286.8	300.3
142.5°	276.9	288.5
145°	262.1	270.9
147.5°	250.7	257.9
150°	243.5	249.4
152.5°	237.3	241.8
155°	230.2	233.2
157.5°	224.7	226.8
160°	221.4	222.6
162.5°	219.2	220.3
165°	216.0	217.2
167.5°	213.8	214.3
170°	213.1	213.1
172.5°	211.5	211.1
175°	210.5	210.5
177.5°	209.6	209.1
180°	209.1	209.1

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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	8.70	10.00	9.33	10.65	11.40	21.86	23.16	22.49	23.82	24.56
	3H	9.44	10.61	10.08	11.27	12.05	23.73	24.91	24.37	25.57	26.35
	4H	9.75	10.87	10.42	11.54	12.33	24.39	25.50	25.05	26.17	26.97
	6H	10.03	11.06	10.70	11.74	12.55	24.84	25.87	25.52	26.55	27.36
	8H	10.11	11.09	10.80	11.80	12.61	24.97	25.95	25.66	26.66	27.47
	12H	10.14	11.08	10.84	11.78	12.62	25.05	25.99	25.75	26.69	27.53
4H	2H	15.96	17.07	16.62	17.74	18.54	22.19	23.30	22.85	23.97	24.77
	3H	17.56	18.50	18.24	19.21	20.02	24.27	25.20	24.95	25.91	26.73
	4H	17.68	18.53	18.37	19.24	20.09	25.05	25.90	25.75	26.62	27.46
	6H	17.71	18.46	18.43	19.19	20.05	25.61	26.35	26.33	27.09	27.94
	8H	17.70	18.40	18.42	19.13	20.00	25.78	26.48	26.50	27.21	28.08
	12H	17.68	18.31	18.42	19.07	19.94	25.90	26.52	26.64	27.28	28.15
8H	4H	19.16	19.85	19.88	20.59	21.45	25.15	25.84	25.87	26.58	27.45
	6H	19.42	20.00	20.17	20.77	21.64	25.79	26.37	26.55	27.15	28.02
	8H	19.44	19.96	20.21	20.74	21.62	26.02	26.53	26.78	27.31	28.20
	12H	19.43	19.89	20.20	20.66	21.60	26.18	26.64	26.95	27.41	28.35
12H	4H	19.32	19.95	20.06	20.71	21.58	25.12	25.75	25.87	26.51	27.38
	6H	19.68	20.20	20.45	20.98	21.86	25.78	26.30	26.55	27.08	27.96
	8H	19.77	20.23	20.54	21.00	21.94	26.03	26.49	26.80	27.26	28.20

END OF REPORT