

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: P936963

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936963
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

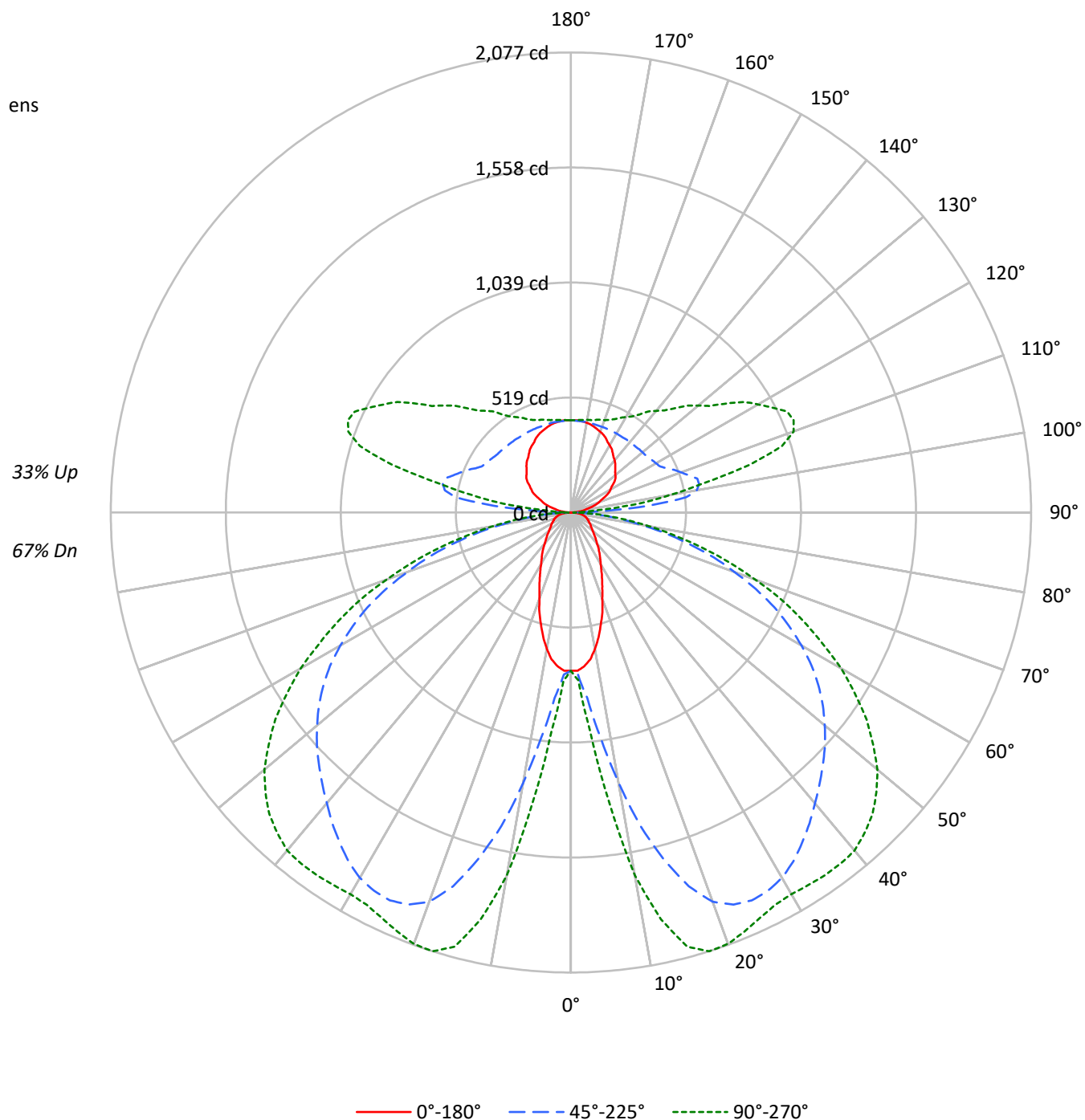
Lumens per Lamp: N/A
Luminaire Lumens: 8232.4 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84
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	111	111	111	111	105	105	105	105	93	93	93		82	82	82		72
1	101	96	92	88	95	91	87	83	80	78	75		71	69	67		62
2	91	83	76	71	86	78	72	67	70	65	61		61	58	55		54
3	83	72	64	58	77	68	61	55	61	55	50		54	49	45		47
4	75	64	55	48	70	60	52	46	53	47	42		47	42	38		42
5	69	56	47	41	64	53	45	39	47	41	36		42	37	32		37
6	63	50	41	35	59	47	39	34	42	36	31		38	32	28		33
7	58	45	36	30	55	43	35	29	38	32	27		34	29	24		30
8	54	41	32	27	51	39	31	26	35	28	24		31	26	22		27
9	50	37	29	24	47	35	28	23	32	25	21		28	23	19		25
10	47	34	26	21	44	32	25	20	29	23	19		26	21	17		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4420	4420	4420
5°	4317	5108	5942
10°	3914	7444	9850
15°	3326	9723	11894
20°	2706	11264	12122
25°	2257	11785	11876
30°	1902	11856	11853
35°	1681	11656	12160
40°	1464	11397	12476
45°	1325	11206	12525
50°	1214	11034	12318
55°	1161	10783	11772
60°	1188	10305	10909
65°	1234	9580	9725
70°	1313	8349	8216
75°	1449	6801	6411
80°	1569	4712	4320
85°	1371	2496	2212

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12525 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	1.1
10°-20°	409.7	5.0
20°-30°	716.6	8.7
30°-40°	922.4	11.2
40°-50°	1030.3	12.5
50°-60°	986.8	12.0
60°-70°	782.0	9.5
70°-80°	459.9	5.6
80°-90°	129.3	1.6
90°-100°	203.2	2.5
100°-110°	534.4	6.5
110°-120°	554.1	6.7
120°-130°	444.4	5.4
130°-140°	348.7	4.2
140°-150°	267.7	3.3
150°-160°	192.8	2.3
160°-170°	117.9	1.4
170°-180°	39.8	0.5
0°-30°	1218.6	14.8
0°-40°	2141.1	26.0
0°-60°	4158.2	50.5
0°-90°	5529.4	67.2
90°-120°	1291.7	15.7
90°-150°	2352.5	28.6
90°-180°	2703.0	32.8
0°-180°	8232.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	696	747	841	951	986	64
15°	522	963	1622	1967	2029	145
25°	333	1091	1932	2017	2020	153
35°	225	1043	1820	1923	1999	141
45°	154	832	1608	1843	1925	119
55°	110	528	1365	1585	1629	100
65°	87	280	1013	1140	1156	87
75°	64	172	556	611	613	67
85°	23	53	138	152	154	24
90°	3	8	21	11	11	4
95°	27	105	350	180	123	30
105°	96	146	591	897	837	102
115°	171	208	473	944	1077	169
125°	238	267	430	727	858	211
135°	284	312	417	587	666	219
145°	329	350	412	501	540	206
155°	372	382	412	452	465	171
165°	401	406	412	428	433	113
175°	417	417	414	420	420	40
180°	417	417	417	417	417	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5	714.5
2.5°	714.5	714.5	719.2	721.4	726.0	728.4	732.9	737.5	751.3	753.6	758.3
5°	696.2	705.4	735.3	746.8	778.9	822.5	840.9	870.8	932.9	951.2	962.7
7.5°	668.6	689.3	762.8	781.2	861.6	976.5	1024.7	1089.1	1187.8	1236.1	1275.2
10°	624.9	668.6	799.5	843.2	974.2	1148.8	1238.4	1328.1	1477.4	1544.0	1569.3
12.5°	576.7	647.9	838.6	898.4	1086.7	1341.8	1449.8	1548.5	1718.6	1808.2	1822.0
15°	521.6	618.0	875.4	962.7	1206.2	1502.7	1622.1	1743.9	1902.5	1966.7	1982.8
17.5°	473.3	595.1	909.9	1001.7	1298.2	1647.4	1769.1	1870.2	1999.0	2042.6	2054.1
20°	413.6	558.3	932.9	1052.3	1394.7	1753.1	1870.2	1948.4	2035.7	2063.2	2067.8
22.5°	369.9	519.3	946.6	1070.7	1459.0	1817.4	1916.2	1978.2	2038.0	2047.2	2049.5
25°	333.2	475.6	944.4	1091.4	1514.2	1856.5	1932.3	1978.2	2012.7	2017.3	2017.3
27.5°	298.7	427.3	935.1	1096.0	1555.5	1865.6	1925.4	1957.6	1973.6	1982.8	1982.8
30°	268.8	381.4	912.1	1086.7	1573.9	1856.5	1904.7	1920.8	1936.9	1950.7	1957.6
32.5°	245.8	337.7	877.6	1068.4	1576.2	1833.5	1868.0	1877.1	1900.1	1932.3	1943.7
35°	225.2	294.1	838.6	1043.1	1562.4	1796.7	1819.7	1828.9	1874.9	1923.1	1939.2
37.5°	204.5	262.0	788.1	999.5	1541.7	1753.1	1769.1	1785.2	1856.5	1913.9	1932.3
40°	183.8	234.3	728.4	951.2	1509.5	1700.3	1714.0	1739.3	1833.5	1900.1	1918.5
42.5°	167.7	211.4	664.0	900.6	1468.2	1640.5	1661.2	1697.9	1805.9	1877.1	1897.9
45°	154.0	188.4	595.1	831.8	1415.3	1578.4	1608.3	1658.9	1773.8	1842.7	1861.1
47.5°	140.1	172.3	523.8	760.5	1357.9	1516.4	1555.5	1612.9	1730.1	1796.7	1812.9
50°	128.6	156.2	452.7	684.7	1295.8	1449.8	1495.8	1555.5	1675.0	1737.0	1757.6
52.5°	119.5	142.5	386.0	608.9	1224.6	1380.8	1433.7	1495.8	1608.3	1668.0	1681.9
55°	110.2	131.0	328.6	528.4	1151.1	1307.3	1364.8	1424.5	1534.8	1585.4	1594.5
57.5°	105.7	121.7	280.3	452.7	1073.0	1224.6	1288.9	1344.1	1447.5	1486.5	1495.8
60°	98.8	114.9	243.6	388.3	988.0	1146.5	1201.7	1256.8	1344.1	1376.3	1383.2
62.5°	91.9	110.2	216.0	326.2	900.6	1054.6	1109.7	1160.3	1233.8	1256.8	1266.0
65°	87.3	105.7	195.3	280.3	811.0	958.1	1013.2	1056.9	1116.6	1139.6	1144.2
67.5°	82.7	101.1	179.2	241.2	721.4	861.6	903.0	944.4	990.2	1013.2	1015.6
70°	75.9	96.5	165.5	213.7	629.5	751.3	785.8	829.4	866.2	877.6	884.6
72.5°	71.2	89.6	156.2	193.0	535.3	645.7	677.8	703.0	735.3	746.8	746.8
75°	64.4	80.4	147.1	172.3	438.8	528.4	556.0	581.3	606.5	611.2	604.3
77.5°	57.5	71.2	126.4	144.7	342.3	418.2	441.2	454.9	475.6	480.2	482.5
80°	48.2	62.0	98.8	112.6	248.1	307.8	324.0	335.5	353.8	353.8	358.4
82.5°	36.7	48.2	71.2	80.4	167.7	211.4	225.2	232.1	243.6	243.6	243.6
85°	23.0	29.9	46.0	52.9	101.1	128.6	137.9	140.1	149.4	151.6	151.6
87.5°	11.5	16.1	29.9	32.1	52.9	66.6	66.6	71.2	71.2	69.0	66.6
90°	2.8	5.1	7.3	7.9	12.3	18.3	21.3	18.9	14.1	10.6	10.6
92.5°	11.2	30.2	49.2	54.0	75.9	105.2	119.8	104.9	75.3	53.1	51.1
95°	26.9	61.6	96.5	105.2	186.8	295.7	350.1	312.5	237.1	180.5	174.1
97.5°	46.4	77.2	107.9	115.6	251.7	433.2	523.9	500.1	452.4	416.6	404.4
100°	61.6	89.4	117.3	124.3	275.3	476.7	577.3	579.0	582.6	585.2	570.7
102.5°	74.4	100.5	126.5	133.0	286.1	490.3	592.4	622.8	683.5	729.0	716.6
105°	96.3	118.3	140.3	145.8	294.1	491.9	590.7	658.8	794.8	896.9	890.2
107.5°	118.7	139.2	159.7	164.8	295.6	470.0	557.1	652.0	841.8	984.2	985.8
110°	133.8	152.2	170.8	175.4	293.4	450.6	529.2	635.2	847.5	1006.6	1013.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	148.6	166.3	183.9	188.4	293.5	433.7	503.7	612.3	829.5	992.3	1003.0
115°	171.0	187.3	203.6	207.6	296.2	414.2	473.2	577.9	787.0	943.9	958.7
117.5°	193.1	207.9	222.7	226.4	301.7	402.1	452.2	546.6	735.4	877.0	893.5
120°	205.9	219.9	233.8	237.3	306.1	397.9	443.8	530.1	702.6	831.9	848.0
122.5°	218.6	232.6	246.7	250.2	312.6	395.7	437.4	515.0	670.5	786.9	802.7
125°	237.9	250.6	263.5	266.7	321.2	394.0	430.4	496.4	628.4	727.3	741.8
127.5°	253.5	266.5	279.4	282.7	329.9	393.0	424.5	481.2	594.4	679.4	691.6
130°	262.0	275.9	289.8	293.3	336.3	393.6	422.3	472.7	573.6	649.3	660.6
132.5°	270.6	284.6	298.5	302.0	341.4	394.0	420.4	465.5	555.8	623.5	633.6
135°	283.5	296.2	308.8	312.0	347.0	393.7	417.0	454.8	530.4	587.1	595.9
137.5°	296.6	309.2	321.7	324.9	355.4	396.0	416.4	448.3	512.2	560.2	567.4
140°	307.6	319.2	330.7	333.6	360.5	396.5	414.5	442.1	497.3	538.7	545.4
142.5°	315.9	326.6	337.3	340.0	364.8	397.9	414.5	438.7	487.2	523.5	529.3
145°	328.8	338.2	347.5	349.8	370.5	397.9	411.7	431.5	471.1	500.9	505.3
147.5°	341.7	350.7	359.9	362.2	378.6	400.6	411.7	427.2	458.5	481.9	485.5
150°	350.1	358.4	366.5	368.6	383.0	402.1	411.7	424.9	451.2	471.0	473.9
152.5°	358.7	365.0	371.2	372.7	385.7	403.0	411.7	422.9	445.4	462.3	464.4
155°	371.7	376.3	380.8	382.0	391.8	405.1	411.7	420.6	438.6	451.9	453.4
157.5°	381.2	385.6	390.1	391.2	398.0	407.1	411.7	418.6	432.6	443.0	444.0
160°	387.6	391.0	394.5	395.4	400.8	408.0	411.7	417.6	429.6	438.6	439.1
162.5°	394.0	396.6	399.3	399.9	403.8	409.0	411.7	416.7	426.8	434.3	434.8
165°	401.0	403.3	405.7	406.3	408.1	410.5	411.7	415.3	422.4	427.9	428.5
167.5°	407.4	408.5	409.7	409.9	411.5	413.5	414.5	416.8	421.5	425.1	425.3
170°	411.7	412.8	413.9	414.2	414.3	414.4	414.5	416.8	421.5	425.1	425.1
172.5°	413.9	414.2	414.4	414.5	414.5	414.5	414.5	416.3	420.0	422.8	422.6
175°	417.0	417.0	417.0	417.0	416.2	415.0	414.5	415.6	418.0	419.7	419.7
177.5°	417.0	417.0	417.0	417.0	416.4	415.5	415.0	415.9	417.8	419.2	418.9
180°	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	714.5	714.5
2.5°	762.8	758.3
5°	981.1	985.7
7.5°	1321.2	1318.8
10°	1642.8	1663.5
12.5°	1877.1	1881.7
15°	2019.6	2028.8
17.5°	2074.7	2077.1
20°	2077.1	2072.5
22.5°	2051.7	2047.2
25°	2021.9	2019.6
27.5°	1994.3	1996.6
30°	1982.8	1989.7
32.5°	1982.8	1994.3
35°	1987.5	1999.0
37.5°	1985.1	1999.0
40°	1976.0	1992.0
42.5°	1950.7	1962.2
45°	1911.6	1925.4
47.5°	1861.1	1870.2
50°	1796.7	1805.9
52.5°	1716.3	1718.6
55°	1619.8	1629.0
57.5°	1516.4	1518.7
60°	1401.6	1408.4
62.5°	1279.8	1279.8
65°	1151.1	1155.7
67.5°	1017.9	1029.3
70°	882.3	884.6
72.5°	749.0	749.0
75°	611.2	613.4
77.5°	480.2	480.2
80°	356.1	358.4
82.5°	245.8	250.5
85°	154.0	154.0
87.5°	71.2	64.4
90°	10.6	10.6
92.5°	42.5	34.1
95°	148.4	122.8
97.5°	355.7	307.0
100°	512.6	454.5
102.5°	666.8	617.0
105°	863.5	836.7
107.5°	992.2	998.8
110°	1041.4	1069.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1045.8	1088.5
115°	1018.0	1077.4
117.5°	959.3	1025.1
120°	911.9	975.9
122.5°	865.8	928.8
125°	799.9	858.0
127.5°	740.7	789.8
130°	705.8	751.1
132.5°	674.2	714.7
135°	630.8	665.7
137.5°	596.0	624.7
140°	572.1	598.9
142.5°	552.3	575.3
145°	522.7	540.1
147.5°	499.9	514.3
150°	485.6	497.3
152.5°	473.3	482.2
155°	459.3	465.1
157.5°	448.1	452.2
160°	441.4	443.8
162.5°	437.1	439.4
165°	430.9	433.2
167.5°	426.3	427.3
170°	425.1	425.1
172.5°	421.7	420.9
175°	419.7	419.7
177.5°	418.0	417.0
180°	417.0	417.0

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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	7.59	8.69	8.38	9.50	10.50	20.76	21.85	21.54	22.67	23.67
	3H	8.31	9.30	9.11	10.13	11.15	22.61	23.60	23.41	24.42	25.45
	4H	8.62	9.56	9.44	10.39	11.43	23.26	24.20	24.08	25.03	26.07
	6H	8.89	9.75	9.71	10.59	11.64	23.70	24.56	24.53	25.40	26.46
	8H	8.96	9.79	9.80	10.65	11.70	23.82	24.65	24.66	25.51	26.56
	12H	8.99	9.77	9.83	10.63	11.71	23.90	24.69	24.74	25.54	26.62
4H	2H	14.83	15.76	15.65	16.59	17.63	21.06	21.99	21.88	22.83	23.87
	3H	16.42	17.20	17.25	18.07	19.12	23.12	23.91	23.95	24.77	25.83
	4H	16.52	17.24	17.37	18.10	19.18	23.89	24.61	24.74	25.47	26.56
	6H	16.55	17.17	17.41	18.05	19.14	24.44	25.07	25.31	25.95	27.04
	8H	16.53	17.11	17.39	17.99	19.09	24.61	25.19	25.48	26.07	27.17
	12H	16.50	17.02	17.38	17.92	19.03	24.71	25.24	25.60	26.14	27.25
8H	4H	17.98	18.56	18.85	19.45	20.55	23.98	24.56	24.84	25.44	26.54
	6H	18.24	18.72	19.13	19.64	20.74	24.61	25.10	25.51	26.02	27.12
	8H	18.26	18.69	19.16	19.60	20.72	24.83	25.26	25.74	26.18	27.30
	12H	18.24	18.62	19.15	19.53	20.69	24.99	25.36	25.89	26.27	27.44
12H	4H	18.14	18.66	19.02	19.56	20.67	23.94	24.47	24.83	25.37	26.47
	6H	18.50	18.93	19.40	19.84	20.96	24.60	25.03	25.50	25.95	27.06
	8H	18.58	18.96	19.49	19.87	21.03	24.84	25.22	25.75	26.13	27.29

END OF REPORT