

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: P937539

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937539
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

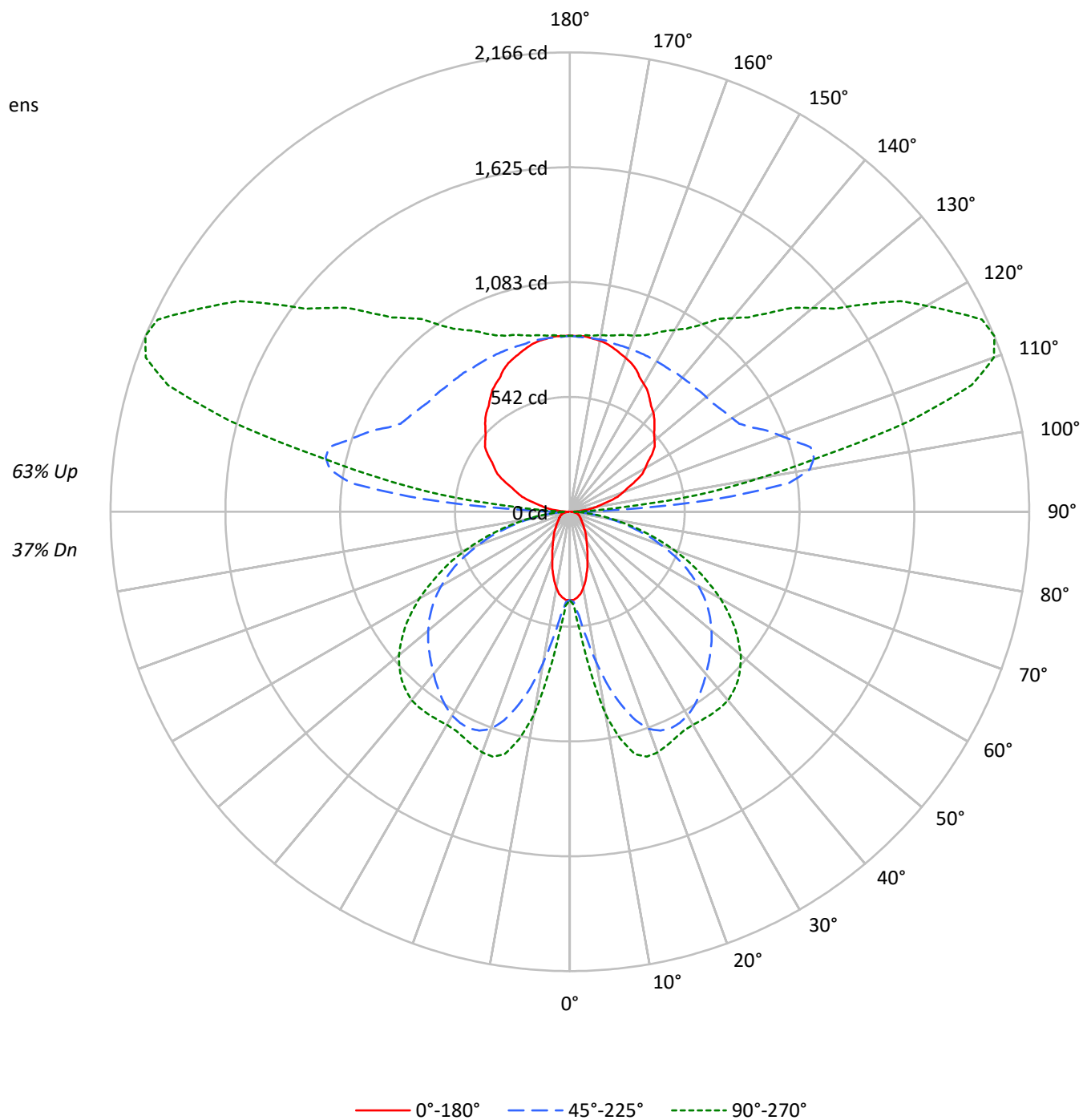
Lumens per Lamp: N/A
Luminaire Lumens: 8603.9 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 73.8
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: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2576	2576	2576
5°	2516	2976	3462
10°	2281	4338	5740
15°	1938	5666	6932
20°	1577	6565	7065
25°	1315	6868	6921
30°	1109	6910	6908
35°	979	6793	7087
40°	853	6641	7271
45°	772	6531	7300
50°	708	6430	7179
55°	677	6284	6860
60°	693	6005	6358
65°	719	5583	5667
70°	764	4865	4788
75°	844	3963	3736
80°	915	2746	2518
85°	799	1453	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7300 cd/sqm

TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	0.6
10°-20°	238.7	2.8
20°-30°	417.6	4.9
30°-40°	537.6	6.2
40°-50°	600.4	7.0
50°-60°	575.1	6.7
60°-70°	455.7	5.3
70°-80°	268.0	3.1
80°-90°	77.6	0.9
90°-100°	404.5	4.7
100°-110°	1063.4	12.4
110°-120°	1102.7	12.8
120°-130°	884.5	10.3
130°-140°	694.0	8.1
140°-150°	532.7	6.2
150°-160°	383.6	4.5
160°-170°	234.7	2.7
170°-180°	79.3	0.9
0°-30°	710.2	8.3
0°-40°	1247.8	14.5
0°-60°	2423.3	28.2
0°-90°	3224.6	37.5
90°-120°	2570.6	29.9
90°-150°	4681.7	54.4
90°-180°	5379.0	62.5
0°-180°	8603.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	406	435	490	554	574	37
15°	304	561	945	1146	1182	85
25°	194	636	1126	1176	1177	89
35°	131	608	1060	1121	1165	82
45°	90	485	937	1074	1122	69
55°	64	308	795	924	949	59
65°	51	163	590	664	674	50
75°	38	100	324	356	358	39
85°	13	31	80	88	90	14
90°	6	16	42	21	21	5
95°	54	209	697	359	244	59
105°	192	290	1176	1785	1665	203
115°	340	413	942	1878	2144	336
125°	473	531	857	1448	1708	420
135°	564	621	830	1168	1325	436
145°	654	696	819	997	1075	410
155°	740	760	819	899	926	340
165°	798	809	819	852	862	225
175°	830	830	825	835	835	79
180°	830	830	830	830	830	

TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4	416.4
2.5°	416.4	416.4	419.1	420.4	423.1	424.4	427.1	429.8	437.8	439.2	441.8
5°	405.7	411.1	428.5	435.2	453.9	479.3	490.0	507.5	543.6	554.3	561.0
7.5°	389.6	401.7	444.5	455.2	502.1	569.0	597.2	634.7	692.2	720.3	743.1
10°	364.2	389.6	465.9	491.4	567.7	669.5	721.7	773.9	860.9	899.8	914.5
12.5°	336.1	377.6	488.7	523.5	633.3	781.9	844.9	902.4	1001.5	1053.8	1061.9
15°	303.9	360.2	510.1	561.0	702.9	875.7	945.3	1016.3	1108.7	1146.2	1155.6
17.5°	275.8	346.8	530.2	583.8	756.5	960.0	1031.1	1090.0	1165.0	1190.4	1197.1
20°	241.0	325.4	543.6	613.2	812.7	1021.7	1090.0	1135.5	1186.4	1202.4	1205.1
22.5°	215.6	302.6	551.6	623.9	850.2	1059.2	1116.8	1152.9	1187.7	1193.1	1194.4
25°	194.1	277.2	550.3	636.0	882.4	1081.9	1126.1	1152.9	1173.0	1175.7	1175.7
27.5°	174.1	249.0	544.9	638.7	906.5	1087.3	1122.1	1140.9	1150.2	1155.6	1155.6
30°	156.7	222.3	531.6	633.3	917.2	1081.9	1110.1	1119.4	1128.8	1136.8	1140.9
32.5°	143.3	196.8	511.5	622.6	918.5	1068.6	1088.6	1094.0	1107.4	1126.1	1132.8
35°	131.2	171.4	488.7	607.9	910.5	1047.1	1060.5	1065.9	1092.7	1120.8	1130.1
37.5°	119.2	152.6	459.3	582.4	898.4	1021.7	1031.1	1040.4	1081.9	1115.4	1126.1
40°	107.1	136.6	424.4	554.3	879.7	990.8	998.8	1013.6	1068.6	1107.4	1118.1
42.5°	97.7	123.2	387.0	524.9	855.6	956.0	968.0	989.5	1052.5	1094.0	1106.0
45°	89.7	109.8	346.8	484.7	824.8	919.8	937.3	966.7	1033.7	1073.9	1084.6
47.5°	81.7	100.4	305.3	443.2	791.3	883.7	906.5	939.9	1008.2	1047.1	1056.5
50°	75.0	91.0	263.8	399.0	755.2	844.9	871.6	906.5	976.1	1012.2	1024.4
52.5°	69.6	83.0	224.9	354.8	713.6	804.7	835.5	871.6	937.3	972.1	980.1
55°	64.3	76.3	191.5	308.0	670.8	761.9	795.3	830.1	894.4	923.9	929.2
57.5°	61.6	71.0	163.3	263.8	625.3	713.6	751.1	783.3	843.5	866.3	871.6
60°	57.6	66.9	141.9	226.3	575.7	668.1	700.3	732.4	783.3	802.0	806.0
62.5°	53.6	64.3	125.9	190.1	524.9	614.6	646.7	676.2	719.0	732.4	737.8
65°	50.9	61.6	113.8	163.3	472.6	558.3	590.5	615.9	650.7	664.1	666.8
67.5°	48.2	58.9	104.4	140.6	420.4	502.1	526.2	550.3	577.1	590.5	591.8
70°	44.2	56.2	96.4	124.5	366.9	437.8	457.9	483.4	504.8	511.5	515.5
72.5°	41.5	52.2	91.0	112.5	312.0	376.2	395.0	409.7	428.5	435.2	435.2
75°	37.5	46.9	85.7	100.4	255.7	308.0	324.0	338.7	353.5	356.2	352.1
77.5°	33.5	41.5	73.6	84.4	199.5	243.7	257.1	265.1	277.2	279.8	281.2
80°	28.1	36.2	57.6	65.6	144.6	179.4	188.8	195.5	206.2	206.2	208.9
82.5°	21.4	28.1	41.5	46.9	97.7	123.2	131.2	135.2	141.9	141.9	141.9
85°	13.4	17.4	26.8	30.8	58.9	75.0	80.3	81.7	87.0	88.4	88.4
87.5°	6.7	9.4	17.4	18.7	30.8	38.8	38.8	41.5	41.5	40.2	38.8
90°	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2	21.2	21.2
92.5°	22.3	60.2	98.0	107.5	151.1	209.2	238.3	208.9	150.0	105.8	101.6
95°	53.5	122.7	192.1	209.4	371.9	588.4	696.7	621.7	471.7	359.2	346.4
97.5°	92.5	153.6	214.8	230.0	500.8	862.0	1042.6	995.2	900.4	829.2	805.0
100°	122.6	178.0	233.4	247.3	547.8	948.5	1148.9	1152.4	1159.3	1164.5	1135.6
102.5°	148.2	199.9	251.6	264.6	569.4	975.8	1179.0	1239.4	1360.2	1450.8	1426.0
105°	191.6	235.4	279.2	290.2	585.4	978.9	1175.7	1311.1	1581.8	1784.9	1771.6
107.5°	236.1	277.0	317.9	328.0	588.3	935.3	1108.8	1297.7	1675.4	1958.7	1961.9
110°	266.2	303.0	340.0	349.2	583.9	896.7	1053.1	1264.2	1686.5	2003.2	2017.1

TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	295.7	330.9	366.1	374.8	584.0	863.0	1002.4	1218.5	1650.7	1974.8	1996.1
115°	340.3	372.7	405.1	413.2	589.4	824.2	941.7	1149.9	1566.3	1878.5	1908.1
117.5°	384.3	413.7	443.2	450.5	600.3	800.1	899.9	1087.8	1463.5	1745.3	1778.1
120°	409.9	437.7	465.3	472.3	609.3	791.9	883.2	1054.9	1398.2	1655.7	1687.5
122.5°	435.0	462.9	490.9	497.9	622.1	787.6	870.5	1025.1	1334.2	1566.0	1597.4
125°	473.4	498.9	524.4	530.8	639.4	784.2	856.6	987.9	1250.5	1447.5	1476.4
127.5°	504.6	530.3	556.1	562.5	656.6	782.1	844.9	957.6	1183.1	1352.2	1376.6
130°	521.3	549.1	576.7	583.7	669.3	783.4	840.4	940.7	1141.5	1292.1	1314.6
132.5°	538.5	566.3	593.9	600.9	679.5	784.2	836.5	926.4	1106.0	1240.8	1261.0
135°	564.1	589.4	614.7	621.0	690.6	783.4	829.8	905.0	1055.5	1168.4	1185.8
137.5°	590.3	615.3	640.4	646.6	707.3	788.3	828.7	892.4	1019.6	1115.0	1129.2
140°	612.1	635.1	658.1	663.8	717.5	789.0	824.8	879.8	989.6	1072.0	1085.3
142.5°	628.8	650.1	671.3	676.7	726.1	791.8	824.8	873.1	969.6	1042.0	1053.4
145°	654.4	672.9	691.5	696.2	737.2	791.9	819.2	858.7	937.7	996.9	1005.5
147.5°	680.0	698.0	716.1	720.6	753.5	797.3	819.2	850.3	912.4	959.0	966.2
150°	696.7	713.0	729.4	733.5	762.0	800.1	819.2	845.5	897.9	937.3	943.1
152.5°	714.0	726.4	738.7	741.9	767.7	802.0	819.2	841.7	886.5	920.0	924.4
155°	739.6	748.7	757.8	760.2	779.9	806.1	819.2	837.1	872.7	899.4	902.3
157.5°	758.5	767.5	776.3	778.5	792.1	810.2	819.2	833.1	860.8	881.6	883.7
160°	771.3	778.3	785.2	786.9	797.7	812.1	819.2	831.1	854.9	872.7	873.9
162.5°	784.2	789.3	794.5	795.9	803.6	814.1	819.2	829.2	849.3	864.3	865.4
165°	798.1	802.7	807.5	808.6	812.2	816.9	819.2	826.4	840.8	851.6	852.7
167.5°	810.9	813.1	815.3	815.9	818.8	822.8	824.8	829.5	838.9	845.9	846.5
170°	819.2	821.5	823.7	824.2	824.4	824.7	824.8	829.5	838.9	845.9	845.9
172.5°	823.7	824.2	824.7	824.8	824.8	824.8	824.8	828.5	835.9	841.5	841.0
175°	829.8	829.8	829.8	829.8	828.1	825.9	824.8	827.1	831.8	835.4	835.4
177.5°	829.8	829.8	829.8	829.8	828.5	826.8	825.9	827.8	831.5	834.2	833.7
180°	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8

TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	416.4	416.4
2.5°	444.5	441.8
5°	571.7	574.4
7.5°	769.9	768.5
10°	957.3	969.4
12.5°	1094.0	1096.7
15°	1177.0	1182.4
17.5°	1209.1	1210.5
20°	1210.5	1207.8
22.5°	1195.8	1193.1
25°	1178.3	1177.0
27.5°	1162.3	1163.6
30°	1155.6	1159.6
32.5°	1155.6	1162.3
35°	1158.3	1165.0
37.5°	1156.9	1165.0
40°	1151.6	1160.9
42.5°	1136.8	1143.5
45°	1114.1	1122.1
47.5°	1084.6	1090.0
50°	1047.1	1052.5
52.5°	1000.2	1001.5
55°	943.9	949.3
57.5°	883.7	885.0
60°	816.7	820.8
62.5°	745.8	745.8
65°	670.8	673.5
67.5°	593.1	599.8
70°	514.1	515.5
72.5°	436.5	436.5
75°	356.2	357.5
77.5°	279.8	279.8
80°	207.5	208.9
82.5°	143.3	145.9
85°	89.7	89.7
87.5°	41.5	37.5
90°	21.2	21.2
92.5°	84.7	67.9
95°	295.5	244.5
97.5°	707.9	610.9
100°	1020.0	904.4
102.5°	1327.0	1228.0
105°	1718.4	1665.2
107.5°	1974.8	1987.7
110°	2072.6	2128.0

TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2081.2	2166.4
115°	2026.1	2144.2
117.5°	1909.0	2040.0
120°	1814.8	1942.0
122.5°	1722.9	1848.4
125°	1591.9	1707.5
127.5°	1474.2	1571.6
130°	1404.7	1494.8
132.5°	1341.7	1422.4
135°	1255.4	1324.9
137.5°	1186.1	1243.1
140°	1138.6	1191.8
142.5°	1099.3	1145.1
145°	1040.3	1074.9
147.5°	994.9	1023.7
150°	966.4	989.6
152.5°	942.0	959.6
155°	914.0	925.6
157.5°	891.8	899.9
160°	878.6	883.2
162.5°	869.9	874.3
165°	857.5	862.1
167.5°	848.4	850.4
170°	845.9	845.9
172.5°	839.3	837.6
175°	835.4	835.4
177.5°	831.7	829.8
180°	829.8	829.8

TEST NUMBER: P937539

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-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	3.02	3.80	4.07	4.86	6.30	16.19	16.97	17.24	18.03	19.47
	3H	3.72	4.42	4.78	5.49	6.95	18.01	18.72	19.07	19.79	21.24
	4H	4.01	4.68	5.09	5.75	7.22	18.65	19.32	19.72	20.39	21.85
	6H	4.26	4.88	5.34	5.95	7.43	19.07	19.69	20.16	20.76	22.24
	8H	4.33	4.91	5.41	6.00	7.47	19.19	19.78	20.28	20.87	22.34
	12H	4.34	4.90	5.43	5.98	7.48	19.25	19.81	20.34	20.90	22.39
4H	2H	10.22	10.89	11.30	11.96	13.42	16.45	17.12	17.53	18.19	19.65
	3H	11.78	12.34	12.87	13.44	14.91	18.48	19.04	19.57	20.14	21.62
	4H	11.87	12.39	12.96	13.47	14.97	19.24	19.76	20.34	20.85	22.34
	6H	11.88	12.32	12.98	13.43	14.92	19.77	20.22	20.88	21.33	22.82
	8H	11.85	12.27	12.95	13.37	14.87	19.93	20.35	21.03	21.45	22.95
	12H	11.80	12.18	12.92	13.30	14.81	20.02	20.39	21.14	21.51	23.02
8H	4H	13.31	13.72	14.41	14.82	16.33	19.30	19.71	20.40	20.81	22.32
	6H	13.54	13.89	14.67	15.03	16.53	19.92	20.26	21.04	21.41	22.91
	8H	13.56	13.86	14.69	14.99	16.51	20.14	20.44	21.27	21.56	23.08
	12H	13.53	13.79	14.66	14.91	16.47	20.27	20.54	21.41	21.66	23.22
12H	4H	13.44	13.82	14.56	14.93	16.45	19.25	19.62	20.37	20.74	22.25
	6H	13.80	14.10	14.93	15.23	16.75	19.90	20.20	21.03	21.33	22.85
	8H	13.87	14.13	15.00	15.25	16.81	20.13	20.39	21.26	21.51	23.07

END OF REPORT