

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: P938383

Luminaire Tested: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938383
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-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

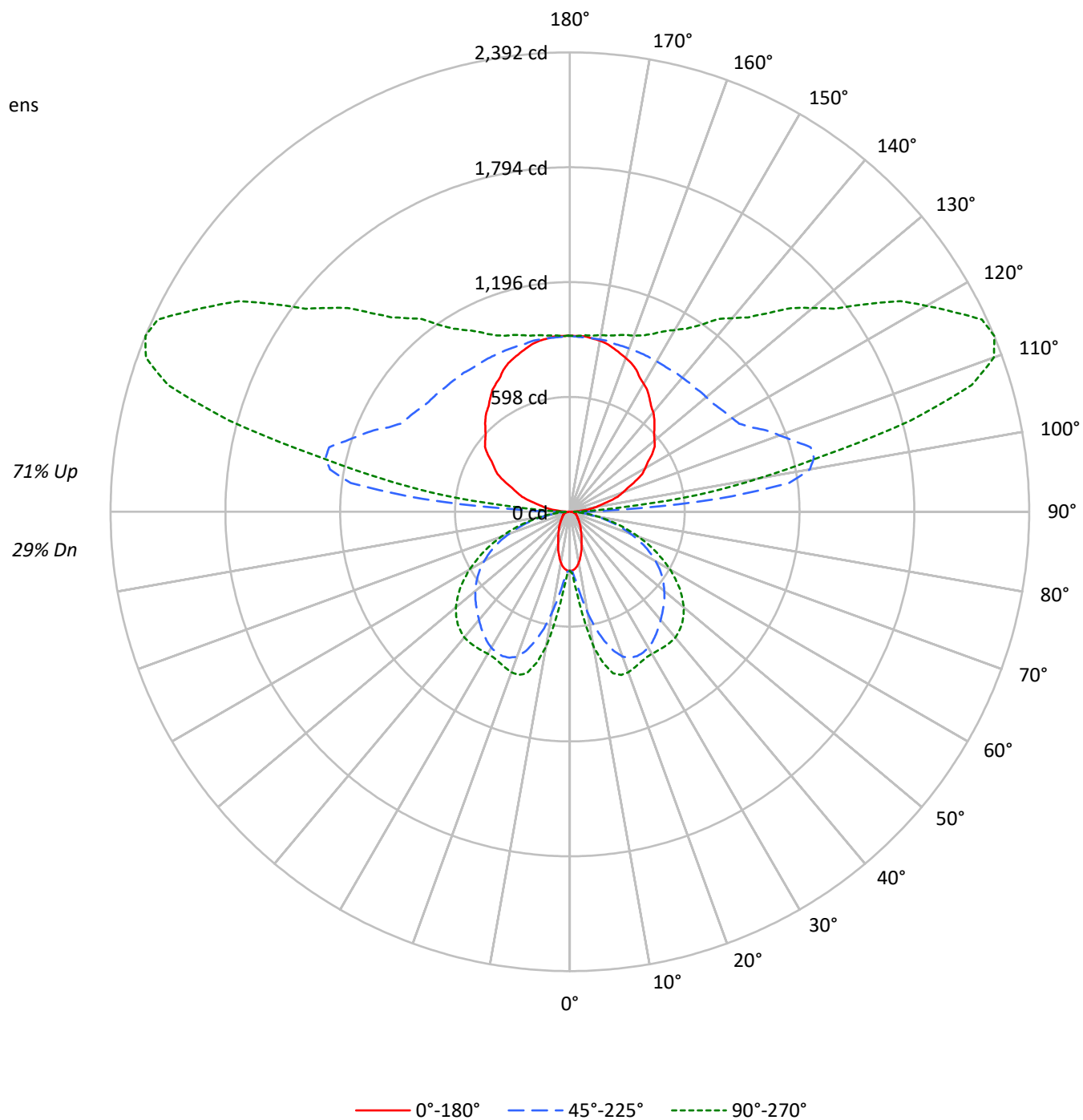
Lumens per Lamp: N/A
Luminaire Lumens: 8315.9 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 63.6
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: P938383

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-4-3000K

Luminous Intensity Polar Plot



TEST NUMBER: P938383

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2845	2845	2845
5°	2777	3286	3825
10°	2516	4787	6341
15°	2136	6249	7656
20°	1737	7237	7803
25°	1447	7567	7645
30°	1219	7609	7630
35°	1075	7477	7827
40°	936	7307	8032
45°	846	7180	8063
50°	774	7065	7929
55°	739	6899	7578
60°	754	6587	7022
65°	781	6117	6261
70°	825	5324	5288
75°	905	4329	4128
80°	969	2991	2781
85°	820	1580	1424

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8063 cd/sqm

TEST NUMBER: P938383

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-4-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.5
10°-20°	175.8	2.1
20°-30°	307.5	3.7
30°-40°	395.8	4.8
40°-50°	442.2	5.3
50°-60°	423.5	5.1
60°-70°	335.6	4.0
70°-80°	197.3	2.4
80°-90°	58.3	0.7
90°-100°	446.7	5.4
100°-110°	1174.3	14.1
110°-120°	1217.6	14.6
120°-130°	976.7	11.7
130°-140°	766.3	9.2
140°-150°	588.2	7.1
150°-160°	423.6	5.1
160°-170°	259.2	3.1
170°-180°	87.6	1.1
0°-30°	523.0	6.3
0°-40°	918.8	11.0
0°-60°	1784.4	21.5
0°-90°	2375.7	28.6
90°-120°	2838.6	34.1
90°-150°	5169.8	62.2
90°-180°	5940.0	71.4
0°-180°	8315.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	307	307	307	307	307	
5°	299	320	361	408	423	28
15°	224	413	696	844	871	62
25°	143	468	829	866	867	66
35°	97	448	781	825	858	60
45°	66	357	690	791	826	51
55°	47	227	586	680	699	43
65°	38	120	435	489	496	37
75°	28	74	239	262	263	29
85°	10	23	59	65	66	10
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	

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CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-4-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6
2.5°	306.6	306.6	308.6	309.6	311.6	312.6	314.5	316.5	322.4	323.4	325.4
5°	298.8	302.7	315.5	320.4	334.3	353.0	360.9	373.7	400.3	408.2	413.1
7.5°	286.9	295.8	327.4	335.2	369.8	419.0	439.8	467.4	509.8	530.5	547.2
10°	268.2	286.9	343.1	361.9	418.1	493.0	531.5	569.9	634.0	662.6	673.4
12.5°	247.5	278.1	359.9	385.5	466.4	575.8	622.2	664.6	737.5	776.0	781.9
15°	223.8	265.2	375.7	413.1	517.6	644.8	696.1	748.4	816.4	844.0	850.9
17.5°	203.1	255.4	390.5	429.9	557.1	707.0	759.2	802.6	857.8	876.6	881.5
20°	177.5	239.6	400.3	451.6	598.5	752.3	802.6	836.1	873.6	885.4	887.4
22.5°	158.7	222.8	406.2	459.5	626.1	779.9	822.3	848.9	874.6	878.5	879.5
25°	143.0	204.1	405.2	468.4	649.8	796.7	829.2	848.9	863.7	865.7	865.7
27.5°	128.2	183.4	401.3	470.3	667.5	800.6	826.3	840.1	847.0	850.9	850.9
30°	115.4	163.7	391.4	466.4	675.4	796.7	817.4	824.3	831.2	837.1	840.1
32.5°	105.5	144.9	376.7	458.5	676.4	786.8	801.6	805.6	815.4	829.2	834.2
35°	96.6	126.2	359.9	447.6	670.5	771.1	780.9	784.9	804.6	825.3	832.2
37.5°	87.8	112.4	338.2	428.9	661.6	752.3	759.2	766.1	796.7	821.3	829.2
40°	78.9	100.6	312.6	408.2	647.8	729.6	735.6	746.4	786.8	815.4	823.3
42.5°	72.0	90.7	285.0	386.5	630.1	704.0	712.9	728.7	775.0	805.6	814.4
45°	66.1	80.9	255.4	356.9	607.4	677.4	690.2	711.9	761.2	790.8	798.7
47.5°	60.1	74.0	224.8	326.4	582.7	650.8	667.5	692.2	742.5	771.1	778.0
50°	55.2	67.0	194.2	293.8	556.1	622.2	641.9	667.5	718.8	745.4	754.3
52.5°	51.3	61.1	165.6	261.3	525.5	592.6	615.3	641.9	690.2	715.8	721.8
55°	47.3	56.2	141.0	226.8	494.0	561.0	585.7	611.3	658.6	680.3	684.3
57.5°	45.4	52.3	120.3	194.2	460.5	525.5	553.1	576.8	621.2	637.9	641.9
60°	42.4	49.3	104.5	166.6	424.0	492.0	515.7	539.3	576.8	590.6	593.6
62.5°	39.4	47.3	92.7	140.0	386.5	452.6	476.2	497.9	529.5	539.3	543.3
65°	37.5	45.4	83.8	120.3	348.1	411.2	434.8	453.6	479.2	489.1	491.0
67.5°	35.5	43.4	76.9	103.5	309.6	369.8	387.5	405.2	425.0	434.8	435.8
70°	32.5	41.4	71.0	91.7	270.2	322.4	337.2	355.9	371.7	376.7	379.6
72.5°	30.6	38.5	67.0	82.8	229.7	277.1	290.9	301.7	315.5	320.4	320.4
75°	27.6	34.5	63.1	74.0	188.3	226.8	238.6	249.5	260.3	262.3	259.3
77.5°	24.6	30.6	54.2	62.1	146.9	179.5	189.3	195.2	204.1	206.1	207.1
80°	20.7	26.6	42.4	48.3	106.5	132.1	139.0	144.0	151.8	151.8	153.8
82.5°	15.8	20.7	30.6	34.5	72.0	90.7	96.6	99.6	104.5	104.5	104.5
85°	9.9	12.8	19.7	22.7	43.4	55.2	59.2	60.1	64.1	65.1	65.1
87.5°	4.9	6.9	12.8	13.8	22.7	28.6	28.6	30.6	30.6	29.6	28.6
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: P938383

CATALOG NUMBER: SQ4-FB-150U-075D-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

TEST NUMBER: P938383

CATALOG NUMBER: SQ4-FB-150U-075D-B2750-1D-UNV-W2A-W-4-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	306.6	306.6
2.5°	327.4	325.4
5°	421.0	423.0
7.5°	567.0	566.0
10°	705.0	713.9
12.5°	805.6	807.5
15°	866.7	870.6
17.5°	890.4	891.3
20°	891.3	889.4
22.5°	880.5	878.5
25°	867.7	866.7
27.5°	855.8	856.8
30°	850.9	853.9
32.5°	850.9	855.8
35°	852.9	857.8
37.5°	851.9	857.8
40°	848.0	854.9
42.5°	837.1	842.0
45°	820.4	826.3
47.5°	798.7	802.6
50°	771.1	775.0
52.5°	736.5	737.5
55°	695.1	699.1
57.5°	650.8	651.7
60°	601.5	604.4
62.5°	549.2	549.2
65°	494.0	496.0
67.5°	436.8	441.7
70°	378.6	379.6
72.5°	321.4	321.4
75°	262.3	263.3
77.5°	206.1	206.1
80°	152.8	153.8
82.5°	105.5	107.5
85°	66.1	66.1
87.5°	30.6	27.6
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	2.24	2.95	3.35	4.07	5.61	15.37	16.09	16.49	17.20	18.75
	3H	2.93	3.57	4.05	4.69	6.26	17.19	17.83	18.31	18.95	20.51
	4H	3.22	3.83	4.36	4.96	6.52	17.81	18.42	18.95	19.55	21.11
	6H	3.47	4.03	4.61	5.15	6.73	18.23	18.79	19.37	19.91	21.49
	8H	3.53	4.06	4.67	5.21	6.78	18.33	18.87	19.48	20.01	21.58
	12H	3.54	4.05	4.69	5.18	6.78	18.39	18.90	19.54	20.03	21.63
4H	2H	9.41	10.02	10.55	11.14	12.71	15.63	16.24	16.77	17.36	18.93
	3H	10.96	11.47	12.11	12.62	14.20	17.65	18.16	18.80	19.31	20.89
	4H	11.05	11.52	12.20	12.66	14.26	18.40	18.87	19.55	20.01	21.60
	6H	11.05	11.46	12.21	12.62	14.21	18.92	19.32	20.07	20.48	22.07
	8H	11.03	11.40	12.18	12.56	14.16	19.07	19.44	20.22	20.60	22.20
	12H	10.98	11.32	12.15	12.48	14.09	19.15	19.49	20.32	20.65	22.26
8H	4H	12.47	12.85	13.63	14.00	15.61	18.45	18.82	19.60	19.98	21.58
	6H	12.71	13.02	13.89	14.21	15.82	19.06	19.37	20.23	20.56	22.16
	8H	12.73	13.00	13.91	14.17	15.79	19.27	19.54	20.45	20.71	22.33
	12H	12.69	12.93	13.87	14.10	15.75	19.40	19.63	20.58	20.80	22.46
12H	4H	12.61	12.95	13.78	14.11	15.72	18.39	18.73	19.57	19.90	21.51
	6H	12.96	13.23	14.14	14.41	16.03	19.04	19.31	20.22	20.48	22.11
	8H	13.02	13.26	14.21	14.43	16.09	19.25	19.49	20.44	20.66	22.32

END OF REPORT