

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: P936245

Luminaire Tested: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936245
REPORT IS A COMBINATION OF REPORTS P933453 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

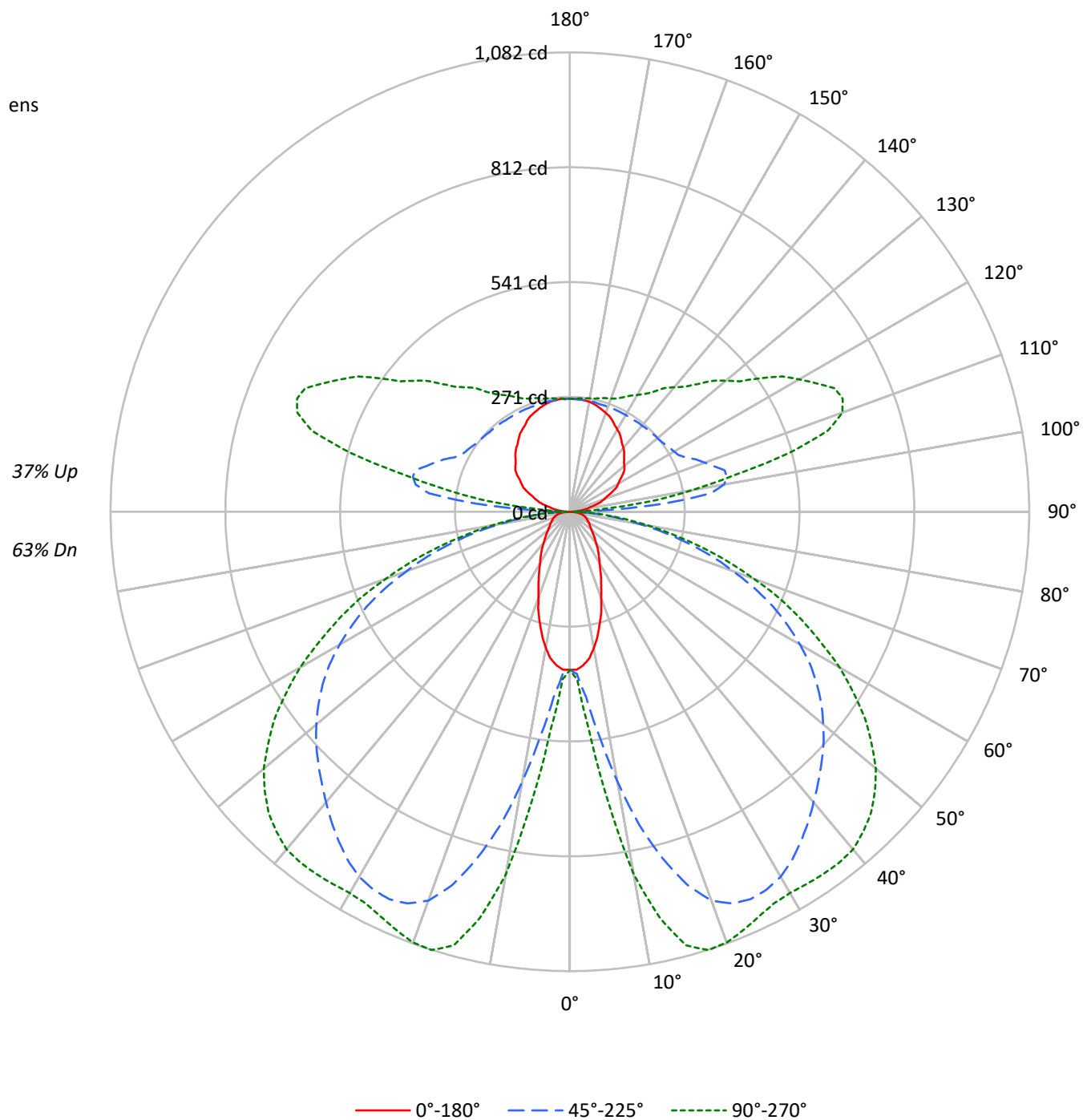
Lumens per Lamp: N/A
Luminaire Lumens: 4608.6 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 44
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: P936245

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-8-3500K

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	30	10	50	30	10
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	68	68	68
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	56	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	46	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	38	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	32	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	28	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	24	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	21	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	18	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	16	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	15	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1727	1727	1727
5°	1688	1997	2322
10°	1531	2911	3850
15°	1301	3803	4649
20°	1059	4407	4737
25°	884	4611	4641
30°	745	4640	4633
35°	659	4563	4752
40°	574	4463	4876
45°	520	4390	4895
50°	477	4324	4814
55°	457	4227	4601
60°	468	4042	4264
65°	486	3759	3801
70°	518	3278	3211
75°	575	2673	2505
80°	629	1854	1688
85°	559	984	864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4895 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	1.0
10°-20°	213.5	4.6
20°-30°	373.4	8.1
30°-40°	480.7	10.4
40°-50°	536.9	11.6
50°-60°	514.2	11.2
60°-70°	407.5	8.8
70°-80°	239.6	5.2
80°-90°	67.6	1.5
90°-100°	129.9	2.8
100°-110°	341.4	7.4
110°-120°	354.0	7.7
120°-130°	284.0	6.2
130°-140°	222.8	4.8
140°-150°	171.0	3.7
150°-160°	123.2	2.7
160°-170°	75.4	1.6
170°-180°	25.5	0.6
0°-30°	635.0	13.8
0°-40°	1115.7	24.2
0°-60°	2166.8	47.0
0°-90°	2881.5	62.5
90°-120°	825.3	17.9
90°-150°	1503.1	32.6
90°-180°	1727.0	37.5
0°-180°	4608.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	363	389	438	496	514	33
15°	272	502	845	1025	1057	76
25°	174	569	1007	1051	1052	80
35°	117	544	948	1002	1042	73
45°	80	433	838	960	1003	62
55°	58	275	711	826	849	52
65°	46	146	528	594	602	45
75°	34	90	290	318	320	35
85°	12	28	72	79	80	13
90°	2	5	14	7	7	2
95°	17	67	224	115	78	19
105°	62	93	378	573	535	65
115°	109	133	302	603	688	108
125°	152	170	275	465	548	135
135°	181	199	266	375	425	140
145°	210	224	263	320	345	132
155°	237	244	263	289	297	109
165°	256	260	263	273	277	72
175°	266	266	265	268	268	25
180°	266	266	266	266	266	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3
2.5°	372.3	372.3	374.7	376.0	378.3	379.5	382.0	384.4	391.5	392.7	395.1
5°	362.8	367.6	383.1	389.1	405.9	428.6	438.2	453.7	486.1	495.7	501.7
7.5°	348.4	359.2	397.5	407.0	449.0	508.8	534.0	567.5	618.9	644.1	664.5
10°	325.6	348.4	416.7	439.4	507.6	598.6	645.4	692.0	769.8	804.5	817.7
12.5°	300.5	337.6	437.0	468.1	566.3	699.2	755.5	806.9	895.6	942.2	949.4
15°	271.8	322.1	456.1	501.7	628.6	783.0	845.3	908.7	991.3	1024.8	1033.2
17.5°	246.6	310.1	474.2	522.0	676.4	858.4	921.9	974.6	1041.6	1064.4	1070.3
20°	215.5	290.9	486.1	548.3	726.8	913.5	974.6	1015.3	1060.8	1075.2	1077.6
22.5°	192.7	270.6	493.3	557.9	760.2	947.1	998.5	1030.9	1062.0	1066.8	1067.9
25°	173.6	247.8	492.1	568.7	789.0	967.4	1006.9	1030.9	1048.8	1051.2	1051.2
27.5°	155.7	222.7	487.3	571.1	810.6	972.2	1003.3	1020.1	1028.5	1033.2	1033.2
30°	140.1	198.8	475.3	566.3	820.1	967.4	992.5	1000.9	1009.3	1016.5	1020.1
32.5°	128.1	176.0	457.4	556.7	821.3	955.4	973.4	978.1	990.1	1006.9	1012.9
35°	117.3	153.3	437.0	543.5	814.2	936.3	948.2	953.1	977.0	1002.1	1010.4
37.5°	106.6	136.5	410.7	520.8	803.4	913.5	921.9	930.3	967.4	997.3	1006.9
40°	95.8	122.1	379.5	495.7	786.6	886.0	893.2	906.4	955.4	990.1	999.7
42.5°	87.4	110.1	346.0	469.3	765.1	854.9	865.7	884.8	941.1	978.1	988.9
45°	80.2	98.2	310.1	433.4	737.5	822.5	838.1	864.4	924.3	960.2	969.7
47.5°	73.0	89.8	273.0	396.3	707.6	790.2	810.6	840.5	901.5	936.3	944.7
50°	67.0	81.4	235.8	356.8	675.3	755.5	779.4	810.6	872.8	905.1	915.9
52.5°	62.2	74.3	201.1	317.2	638.1	719.5	747.1	779.4	838.1	869.2	876.4
55°	57.5	68.3	171.2	275.4	599.8	681.2	711.2	742.3	799.8	826.1	830.9
57.5°	55.1	63.5	146.0	235.8	559.1	638.1	671.7	700.4	754.3	774.6	779.4
60°	51.5	59.9	126.9	202.4	514.9	597.4	626.2	654.9	700.4	717.1	720.8
62.5°	47.9	57.5	112.6	170.0	469.3	549.6	578.2	604.7	643.0	654.9	659.7
65°	45.5	55.1	101.8	146.0	422.7	499.2	528.0	550.7	581.9	593.9	596.3
67.5°	43.1	52.7	93.4	125.7	376.0	449.0	470.5	492.1	516.0	528.0	529.1
70°	39.5	50.3	86.2	111.3	328.0	391.5	409.4	432.2	451.4	457.4	460.9
72.5°	37.1	46.7	81.4	100.6	278.9	336.4	353.2	366.3	383.1	389.1	389.1
75°	33.6	41.9	76.6	89.8	228.7	275.4	289.7	302.9	316.1	318.5	314.9
77.5°	29.9	37.1	65.9	75.4	178.4	217.9	229.8	237.1	247.8	250.2	251.5
80°	25.2	32.3	51.5	58.6	129.3	160.4	168.8	174.8	184.4	184.4	186.7
82.5°	19.2	25.2	37.1	41.9	87.4	110.1	117.3	121.0	126.9	126.9	126.9
85°	12.0	15.5	23.9	27.5	52.7	67.0	71.9	73.0	77.8	79.0	79.0
87.5°	6.0	8.4	15.5	16.8	27.5	34.7	34.7	37.1	37.1	35.9	34.7
90°	1.8	3.2	4.6	5.0	7.9	11.7	13.6	12.1	9.0	6.8	6.8
92.5°	7.1	19.3	31.5	34.5	48.6	67.2	76.5	67.0	48.2	34.0	32.7
95°	17.1	39.4	61.7	67.2	119.3	188.9	223.7	199.6	151.5	115.3	111.2
97.5°	29.7	49.4	68.9	73.8	160.8	276.7	334.7	319.6	289.1	266.3	258.5
100°	39.4	57.1	74.9	79.4	175.8	304.5	368.8	370.0	372.2	373.9	364.6
102.5°	47.6	64.2	80.8	84.9	182.8	313.3	378.6	397.9	436.7	465.8	457.8
105°	61.5	75.6	89.7	93.2	188.0	314.3	377.5	421.0	507.9	573.1	568.8
107.5°	75.8	88.9	102.0	105.3	188.9	300.3	356.0	416.6	537.9	628.9	629.9
110°	85.5	97.3	109.2	112.1	187.5	287.9	338.1	405.9	541.5	643.1	647.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	95.0	106.2	117.5	120.3	187.5	277.1	321.9	391.2	529.9	634.0	640.9
115°	109.3	119.6	130.1	132.6	189.2	264.7	302.3	369.2	502.9	603.1	612.6
117.5°	123.4	132.8	142.3	144.7	192.8	256.9	288.9	349.3	469.9	560.4	570.9
120°	131.6	140.5	149.4	151.7	195.7	254.3	283.6	338.7	448.9	531.6	541.7
122.5°	139.6	148.6	157.6	159.9	199.8	252.9	279.5	329.1	428.4	502.8	512.9
125°	152.0	160.2	168.3	170.4	205.3	251.8	275.0	317.1	401.5	464.7	474.0
127.5°	162.0	170.2	178.5	180.6	210.8	251.1	271.3	307.5	379.9	434.2	442.0
130°	167.4	176.3	185.1	187.4	214.9	251.5	269.8	302.1	366.5	414.8	422.0
132.5°	172.9	181.8	190.7	192.9	218.2	251.8	268.6	297.4	355.1	398.4	404.9
135°	181.1	189.2	197.4	199.4	221.7	251.5	266.4	290.6	338.9	375.2	380.7
137.5°	189.5	197.5	205.6	207.6	227.1	253.1	266.1	286.5	327.3	357.9	362.5
140°	196.5	203.9	211.3	213.2	230.4	253.3	264.8	282.5	317.8	344.2	348.5
142.5°	201.9	208.7	215.6	217.3	233.2	254.3	264.8	280.4	311.3	334.6	338.2
145°	210.1	216.1	222.0	223.5	236.7	254.3	263.1	275.7	301.1	320.1	322.9
147.5°	218.3	224.1	229.9	231.4	241.9	256.0	263.1	273.1	293.0	307.9	310.2
150°	223.7	229.0	234.1	235.5	244.7	256.9	263.1	271.4	288.3	300.9	302.8
152.5°	229.2	233.2	237.2	238.2	246.5	257.5	263.1	270.2	284.6	295.4	296.8
155°	237.4	240.4	243.3	244.0	250.4	258.9	263.1	268.8	280.2	288.8	289.7
157.5°	243.5	246.4	249.2	249.9	254.3	260.1	263.1	267.5	276.4	283.0	283.7
160°	247.6	249.8	252.1	252.6	256.1	260.7	263.1	266.9	274.5	280.2	280.6
162.5°	251.7	253.4	255.0	255.5	258.0	261.4	263.1	266.3	272.7	277.5	277.9
165°	256.3	257.8	259.3	259.7	260.8	262.3	263.1	265.4	269.9	273.4	273.8
167.5°	260.4	261.1	261.8	262.0	263.0	264.2	264.8	266.4	269.4	271.6	271.8
170°	263.1	263.8	264.5	264.7	264.8	264.8	264.8	266.4	269.4	271.6	271.6
172.5°	264.5	264.7	264.8	264.8	264.8	264.8	264.8	266.0	268.4	270.2	270.0
175°	266.4	266.4	266.4	266.4	265.9	265.2	264.8	265.6	267.1	268.2	268.2
177.5°	266.4	266.4	266.4	266.4	266.0	265.5	265.2	265.8	267.0	267.9	267.7
180°	266.4	266.4	266.4	266.4	266.4	266.4	266.4	266.4	266.4	266.4	266.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	372.3	372.3
2.5°	397.5	395.1
5°	511.2	513.6
7.5°	688.4	687.2
10°	856.0	866.8
12.5°	978.1	980.5
15°	1052.4	1057.2
17.5°	1081.1	1082.3
20°	1082.3	1079.9
22.5°	1069.2	1066.8
25°	1053.6	1052.4
27.5°	1039.2	1040.4
30°	1033.2	1036.9
32.5°	1033.2	1039.2
35°	1035.6	1041.6
37.5°	1034.5	1041.6
40°	1029.6	1038.0
42.5°	1016.5	1022.5
45°	996.2	1003.3
47.5°	969.7	974.6
50°	936.3	941.1
52.5°	894.3	895.6
55°	844.1	848.9
57.5°	790.2	791.4
60°	730.3	733.9
62.5°	666.9	666.9
65°	599.8	602.3
67.5°	530.4	536.4
70°	459.8	460.9
72.5°	390.3	390.3
75°	318.5	319.6
77.5°	250.2	250.2
80°	185.6	186.7
82.5°	128.1	130.5
85°	80.2	80.2
87.5°	37.1	33.6
90°	6.8	6.8
92.5°	27.2	21.8
95°	94.9	78.5
97.5°	227.3	196.1
100°	327.5	290.4
102.5°	426.0	394.3
105°	551.7	534.6
107.5°	634.0	638.1
110°	665.4	683.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	668.2	695.5
115°	650.5	688.4
117.5°	613.0	655.0
120°	582.6	623.5
122.5°	553.2	593.4
125°	511.1	548.2
127.5°	473.3	504.6
130°	451.0	479.9
132.5°	430.8	456.7
135°	403.0	425.3
137.5°	380.8	399.1
140°	365.5	382.7
142.5°	352.9	367.6
145°	334.0	345.1
147.5°	319.4	328.7
150°	310.3	317.8
152.5°	302.4	308.0
155°	293.4	297.2
157.5°	286.4	288.9
160°	282.1	283.6
162.5°	279.3	280.7
165°	275.3	276.8
167.5°	272.4	273.1
170°	271.6	271.6
172.5°	269.5	268.9
175°	268.2	268.2
177.5°	267.1	266.4
180°	266.4	266.4

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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	3.97	5.00	4.80	5.87	6.94	17.15	18.19	17.98	19.05	20.12
	3H	4.69	5.62	5.53	6.49	7.60	19.00	19.94	19.85	20.81	21.91
	4H	4.99	5.88	5.86	6.76	7.87	19.65	20.54	20.52	21.42	22.53
	6H	5.25	6.07	6.13	6.96	8.08	20.09	20.91	20.97	21.80	22.92
	8H	5.33	6.11	6.21	7.01	8.14	20.22	21.00	21.10	21.90	23.03
	12H	5.35	6.09	6.24	6.99	8.15	20.29	21.04	21.18	21.94	23.09
4H	2H	11.21	12.09	12.07	12.97	14.08	17.44	18.33	18.31	19.21	20.32
	3H	12.79	13.53	13.67	14.44	15.57	19.51	20.25	20.38	21.16	22.29
	4H	12.89	13.57	13.78	14.48	15.63	20.28	20.96	21.17	21.86	23.02
	6H	12.91	13.50	13.82	14.43	15.59	20.83	21.42	21.74	22.35	23.50
	8H	12.90	13.44	13.80	14.37	15.54	21.00	21.55	21.91	22.47	23.64
	12H	12.86	13.36	13.79	14.30	15.48	21.10	21.60	22.03	22.54	23.72
8H	4H	14.35	14.90	15.26	15.83	17.00	20.36	20.90	21.26	21.83	23.00
	6H	14.60	15.06	15.54	16.02	17.20	20.99	21.45	21.93	22.42	23.59
	8H	14.62	15.03	15.57	15.98	17.17	21.22	21.62	22.16	22.58	23.77
	12H	14.60	14.96	15.55	15.91	17.14	21.37	21.73	22.32	22.68	23.91
12H	4H	14.50	15.00	15.43	15.94	17.12	20.32	20.81	21.25	21.76	22.93
	6H	14.86	15.27	15.81	16.23	17.41	20.98	21.38	21.92	22.34	23.53
	8H	14.94	15.30	15.89	16.25	17.49	21.22	21.57	22.17	22.52	23.76

END OF REPORT