

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: P937575

Luminaire Tested: SQ4-FB-100U-075D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937575
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

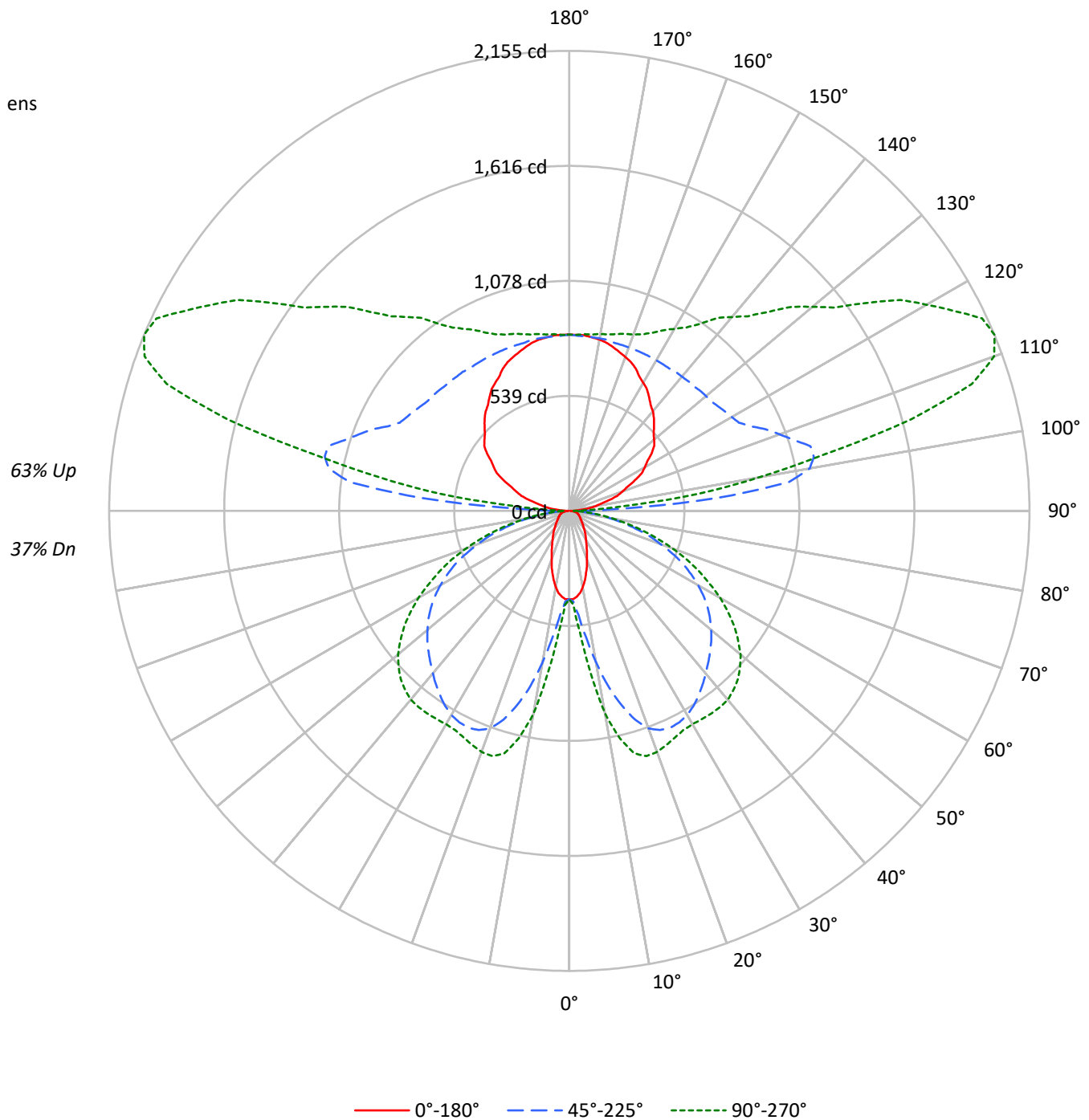
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8559.4 lumens
Efficiency: N/A
Efficacy: 116.0 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-Indirect

Input Watts (W): 73.8
Input Voltage (V): NR
Input Current (A_{in}): 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				20	
RC	80				70				50				30				10				0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31				31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25				25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21				21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17				17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10				10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2563	2563	2563
5°	2503	2961	3444
10°	2269	4315	5711
15°	1928	5637	6896
20°	1569	6531	7028
25°	1308	6832	6885
30°	1102	6874	6872
35°	974	6758	7050
40°	849	6607	7233
45°	768	6497	7262
50°	704	6396	7141
55°	673	6251	6825
60°	689	5974	6325
65°	715	5554	5638
70°	761	4840	4763
75°	839	3942	3717
80°	911	2731	2505
85°	793	1446	1281

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7262 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	0.6
10°-20°	237.5	2.8
20°-30°	415.4	4.9
30°-40°	534.8	6.2
40°-50°	597.3	7.0
50°-60°	572.1	6.7
60°-70°	453.4	5.3
70°-80°	266.6	3.1
80°-90°	77.2	0.9
90°-100°	402.4	4.7
100°-110°	1057.9	12.4
110°-120°	1096.9	12.8
120°-130°	879.9	10.3
130°-140°	690.4	8.1
140°-150°	529.9	6.2
150°-160°	381.6	4.5
160°-170°	233.5	2.7
170°-180°	78.9	0.9
0°-30°	706.5	8.3
0°-40°	1241.3	14.5
0°-60°	2410.7	28.2
0°-90°	3207.9	37.5
90°-120°	2557.3	29.9
90°-150°	4657.5	54.4
90°-180°	5352.0	62.5
0°-180°	8559.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	404	433	488	551	571	37
15°	302	558	940	1140	1176	84
25°	193	633	1120	1170	1171	89
35°	130	605	1055	1115	1159	81
45°	89	482	932	1068	1116	69
55°	64	306	791	919	944	58
65°	51	162	587	661	670	50
75°	37	100	322	354	356	39
85°	13	31	80	88	89	14
90°	6	16	42	21	21	5
95°	53	208	693	357	243	59
105°	191	289	1170	1776	1657	202
115°	338	411	937	1869	2133	334
125°	471	528	852	1440	1699	418
135°	561	618	826	1162	1318	434
145°	651	693	815	992	1069	408
155°	736	756	815	895	921	338
165°	794	804	815	847	858	224
175°	826	826	820	831	831	78
180°	826	826	826	826	826	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	414.3	414.3	416.9	418.2	420.9	422.2	424.9	427.6	435.6	436.9	439.6
5°	403.6	408.9	426.2	432.9	451.5	476.9	487.5	504.8	540.8	551.4	558.1
7.5°	387.6	399.6	442.2	452.9	499.5	566.1	594.1	631.4	688.6	716.6	739.3
10°	362.3	387.6	463.5	488.8	564.8	666.0	717.9	769.9	856.5	895.1	909.8
12.5°	334.3	375.6	486.2	520.8	630.0	777.9	840.5	897.8	996.3	1048.4	1056.4
15°	302.4	358.3	507.5	558.1	699.3	871.1	940.4	1011.1	1103.0	1140.3	1149.6
17.5°	274.4	345.0	527.5	580.8	752.6	955.0	1025.7	1084.3	1158.9	1184.2	1190.9
20°	239.8	323.7	540.8	610.1	808.5	1016.4	1084.3	1129.6	1180.2	1196.2	1198.9
22.5°	214.5	301.0	548.8	620.7	845.8	1053.7	1111.0	1146.9	1181.6	1186.9	1188.2
25°	193.1	275.7	547.5	632.7	877.8	1076.3	1120.3	1146.9	1166.9	1169.6	1169.6
27.5°	173.2	247.8	542.1	635.4	901.8	1081.7	1116.3	1135.0	1144.3	1149.6	1149.6
30°	155.8	221.1	528.8	630.0	912.4	1076.3	1104.3	1113.6	1123.0	1131.0	1135.0
32.5°	142.5	195.8	508.8	619.4	913.8	1063.0	1083.0	1088.3	1101.7	1120.3	1127.0
35°	130.5	170.5	486.2	604.7	905.8	1041.7	1055.0	1060.4	1087.0	1115.0	1124.3
37.5°	118.5	151.8	456.9	579.4	893.8	1016.4	1025.7	1035.1	1076.3	1109.6	1120.3
40°	106.6	135.9	422.2	551.4	875.1	985.7	993.7	1008.3	1063.0	1101.7	1112.3
42.5°	97.2	122.5	384.9	522.1	851.1	951.0	963.0	984.3	1047.0	1088.3	1100.3
45°	89.2	109.2	345.0	482.2	820.5	915.1	932.4	961.7	1028.4	1068.4	1079.0
47.5°	81.3	99.9	303.7	440.9	787.2	879.1	901.8	935.1	1003.0	1041.7	1051.0
50°	74.6	90.6	262.4	396.9	751.2	840.5	867.1	901.8	971.0	1007.0	1019.1
52.5°	69.3	82.6	223.8	353.0	710.0	800.5	831.2	867.1	932.4	967.0	975.0
55°	63.9	75.9	190.5	306.4	667.3	757.9	791.2	825.8	889.8	919.1	924.4
57.5°	61.3	70.6	162.5	262.4	622.0	710.0	747.3	779.2	839.2	861.8	867.1
60°	57.3	66.6	141.2	225.1	572.8	664.7	696.6	728.6	779.2	797.9	801.9
62.5°	53.3	63.9	125.2	189.1	522.1	611.4	643.4	672.7	715.3	728.6	733.9
65°	50.6	61.3	113.2	162.5	470.2	555.4	587.4	612.7	647.4	660.7	663.3
67.5°	48.0	58.6	103.9	139.9	418.2	499.5	523.5	547.5	574.1	587.4	588.7
70°	44.0	55.9	95.9	123.9	365.0	435.6	455.5	480.9	502.2	508.8	512.8
72.5°	41.3	51.9	90.6	111.9	310.4	374.3	392.9	407.6	426.2	432.9	432.9
75°	37.3	46.6	85.2	99.9	254.4	306.4	322.3	337.0	351.6	354.3	350.3
77.5°	33.3	41.3	73.3	83.9	198.5	242.4	255.7	263.7	275.7	278.4	279.7
80°	28.0	36.0	57.3	65.3	143.9	178.5	187.8	194.5	205.1	205.1	207.8
82.5°	21.3	28.0	41.3	46.6	97.2	122.5	130.5	134.5	141.2	141.2	141.2
85°	13.3	17.3	26.6	30.6	58.6	74.6	79.9	81.3	86.6	87.9	87.9
87.5°	6.7	9.3	17.3	18.6	30.6	38.6	38.6	41.3	41.3	40.0	38.6
90°	5.5	9.9	14.4	15.5	24.4	36.2	42.1	37.4	28.1	21.0	21.0
92.5°	22.2	59.9	97.5	106.9	150.3	208.1	237.1	207.8	149.2	105.2	101.1
95°	53.2	122.1	191.1	208.3	369.9	585.4	693.1	618.5	469.2	357.3	344.6
97.5°	92.0	152.8	213.7	228.8	498.3	857.5	1037.2	990.0	895.7	825.0	800.8
100°	121.9	177.1	232.2	246.0	545.0	943.6	1142.9	1146.4	1153.3	1158.5	1129.7
102.5°	147.4	198.9	250.3	263.2	566.5	970.8	1172.9	1233.0	1353.1	1443.3	1418.7
105°	190.6	234.2	277.8	288.7	582.4	973.9	1169.6	1304.3	1573.6	1775.6	1762.4
107.5°	234.9	275.5	316.2	326.3	585.3	930.4	1103.1	1291.0	1666.7	1948.5	1951.7
110°	264.8	301.5	338.2	347.4	580.8	892.1	1047.7	1257.7	1677.8	1992.8	2006.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	294.2	329.2	364.2	372.9	581.0	858.5	997.2	1212.2	1642.2	1964.6	1985.7
115°	338.5	370.7	403.0	411.1	586.3	820.0	936.8	1143.9	1558.2	1868.8	1898.2
117.5°	382.3	411.6	440.9	448.2	597.2	795.9	895.3	1082.2	1456.0	1736.3	1768.9
120°	407.8	435.4	462.9	469.8	606.1	787.8	878.7	1049.4	1391.0	1647.2	1678.8
122.5°	432.7	460.5	488.4	495.3	618.8	783.6	866.0	1019.8	1327.3	1557.9	1589.2
125°	470.9	496.3	521.7	528.0	636.1	780.1	852.1	982.7	1244.0	1440.0	1468.8
127.5°	502.0	527.6	553.2	559.6	653.2	778.1	840.5	952.6	1177.0	1345.2	1369.5
130°	518.6	546.2	573.7	580.7	665.8	779.3	836.1	935.9	1135.6	1285.4	1307.8
132.5°	535.7	563.3	590.9	597.8	675.9	780.1	832.1	921.6	1100.3	1234.4	1254.5
135°	561.2	586.3	611.5	617.8	687.0	779.3	825.5	900.3	1050.1	1162.4	1179.7
137.5°	587.2	612.1	637.1	643.3	703.7	784.2	824.4	887.7	1014.3	1109.2	1123.3
140°	608.9	631.8	654.7	660.4	713.8	784.9	820.5	875.2	984.5	1066.5	1079.7
142.5°	625.5	646.7	667.9	673.2	722.3	787.7	820.5	868.6	964.5	1036.6	1047.9
145°	651.0	669.5	687.9	692.6	733.4	787.8	815.0	854.3	932.8	991.7	1000.3
147.5°	676.5	694.4	712.4	716.9	749.6	793.2	815.0	845.9	907.7	954.1	961.2
150°	693.1	709.3	725.6	729.7	758.1	796.0	815.0	841.1	893.2	932.4	938.2
152.5°	710.3	722.7	734.9	738.0	763.7	797.9	815.0	837.3	881.9	915.3	919.6
155°	735.8	744.9	753.9	756.2	775.8	802.0	815.0	832.8	868.2	894.7	897.7
157.5°	754.6	763.5	772.3	774.5	788.0	806.0	815.0	828.8	856.4	877.1	879.1
160°	767.3	774.2	781.2	782.9	793.6	807.9	815.0	826.8	850.4	868.2	869.4
162.5°	780.1	785.3	790.4	791.7	799.5	809.9	815.0	825.0	844.9	859.9	860.9
165°	794.0	798.6	803.3	804.4	808.0	812.7	815.0	822.1	836.4	847.2	848.3
167.5°	806.7	808.9	811.1	811.6	814.6	818.6	820.5	825.2	834.5	841.6	842.1
170°	815.0	817.2	819.4	820.0	820.2	820.4	820.5	825.2	834.5	841.6	841.6
172.5°	819.4	819.9	820.4	820.5	820.5	820.5	820.5	824.2	831.6	837.1	836.7
175°	825.5	825.5	825.5	825.5	823.8	821.6	820.5	822.8	827.5	831.1	831.1
177.5°	825.5	825.5	825.5	825.5	824.2	822.6	821.7	823.5	827.2	829.9	829.4
180°	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	414.3	414.3
2.5°	442.2	439.6
5°	568.8	571.4
7.5°	765.9	764.6
10°	952.4	964.4
12.5°	1088.3	1091.0
15°	1170.9	1176.2
17.5°	1202.9	1204.2
20°	1204.2	1201.6
22.5°	1189.6	1186.9
25°	1172.2	1170.9
27.5°	1156.3	1157.6
30°	1149.6	1153.6
32.5°	1149.6	1156.3
35°	1152.3	1158.9
37.5°	1150.9	1158.9
40°	1145.6	1154.9
42.5°	1131.0	1137.6
45°	1108.3	1116.3
47.5°	1079.0	1084.3
50°	1041.7	1047.0
52.5°	995.0	996.3
55°	939.1	944.4
57.5°	879.1	880.5
60°	812.5	816.5
62.5°	741.9	741.9
65°	667.3	670.0
67.5°	590.1	596.7
70°	511.5	512.8
72.5°	434.2	434.2
75°	354.3	355.6
77.5°	278.4	278.4
80°	206.5	207.8
82.5°	142.5	145.2
85°	89.2	89.2
87.5°	41.3	37.3
90°	21.0	21.0
92.5°	84.3	67.6
95°	293.9	243.2
97.5°	704.3	607.7
100°	1014.7	899.7
102.5°	1320.1	1221.6
105°	1709.5	1656.6
107.5°	1964.6	1977.4
110°	2061.8	2117.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2070.5	2155.2
115°	2015.6	2133.1
117.5°	1899.2	2029.4
120°	1805.4	1931.9
122.5°	1714.0	1838.9
125°	1583.7	1698.7
127.5°	1466.5	1563.5
130°	1397.4	1487.0
132.5°	1334.8	1415.0
135°	1248.9	1318.1
137.5°	1180.0	1236.6
140°	1132.7	1185.7
142.5°	1093.6	1139.1
145°	1034.9	1069.3
147.5°	989.8	1018.4
150°	961.3	984.5
152.5°	937.1	954.6
155°	909.2	920.8
157.5°	887.2	895.3
160°	874.1	878.7
162.5°	865.4	869.8
165°	853.0	857.6
167.5°	844.0	846.0
170°	841.6	841.6
172.5°	835.0	833.3
175°	831.1	831.1
177.5°	827.4	825.5
180°	825.5	825.5



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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	3.00	3.79	4.05	4.85	6.28	16.17	16.95	17.22	18.01	19.45
	3H	3.70	4.41	4.76	5.48	6.93	18.00	18.70	19.06	19.77	21.22
	4H	4.00	4.67	5.07	5.74	7.20	18.63	19.30	19.71	20.37	21.84
	6H	4.24	4.86	5.32	5.93	7.41	19.06	19.67	20.14	20.75	22.22
	8H	4.31	4.90	5.40	5.99	7.46	19.17	19.76	20.26	20.85	22.32
	12H	4.32	4.88	5.42	5.97	7.46	19.24	19.79	20.33	20.88	22.37
4H	2H	10.20	10.87	11.28	11.94	13.40	16.43	17.10	17.51	18.17	19.63
	3H	11.76	12.32	12.85	13.42	14.89	18.47	19.03	19.55	20.12	21.60
	4H	11.85	12.37	12.94	13.46	14.95	19.23	19.74	20.32	20.83	22.32
	6H	11.86	12.30	12.96	13.41	14.90	19.76	20.20	20.86	21.31	22.80
	8H	11.83	12.25	12.93	13.35	14.86	19.91	20.33	21.02	21.43	22.94
	12H	11.79	12.16	12.91	13.28	14.79	20.00	20.38	21.12	21.49	23.00
8H	4H	13.29	13.70	14.39	14.80	16.31	19.28	19.69	20.38	20.80	22.30
	6H	13.53	13.87	14.65	15.01	16.52	19.90	20.24	21.02	21.39	22.89
	8H	13.54	13.84	14.67	14.97	16.49	20.12	20.42	21.25	21.54	23.07
	12H	13.51	13.77	14.64	14.89	16.45	20.26	20.52	21.39	21.64	23.20
12H	4H	13.43	13.80	14.54	14.92	16.43	19.23	19.60	20.35	20.72	22.23
	6H	13.78	14.08	14.91	15.21	16.73	19.88	20.18	21.01	21.31	22.83
	8H	13.85	14.11	14.98	15.23	16.79	20.11	20.37	21.24	21.49	23.05