

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: P938374

Luminaire Tested: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938374
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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

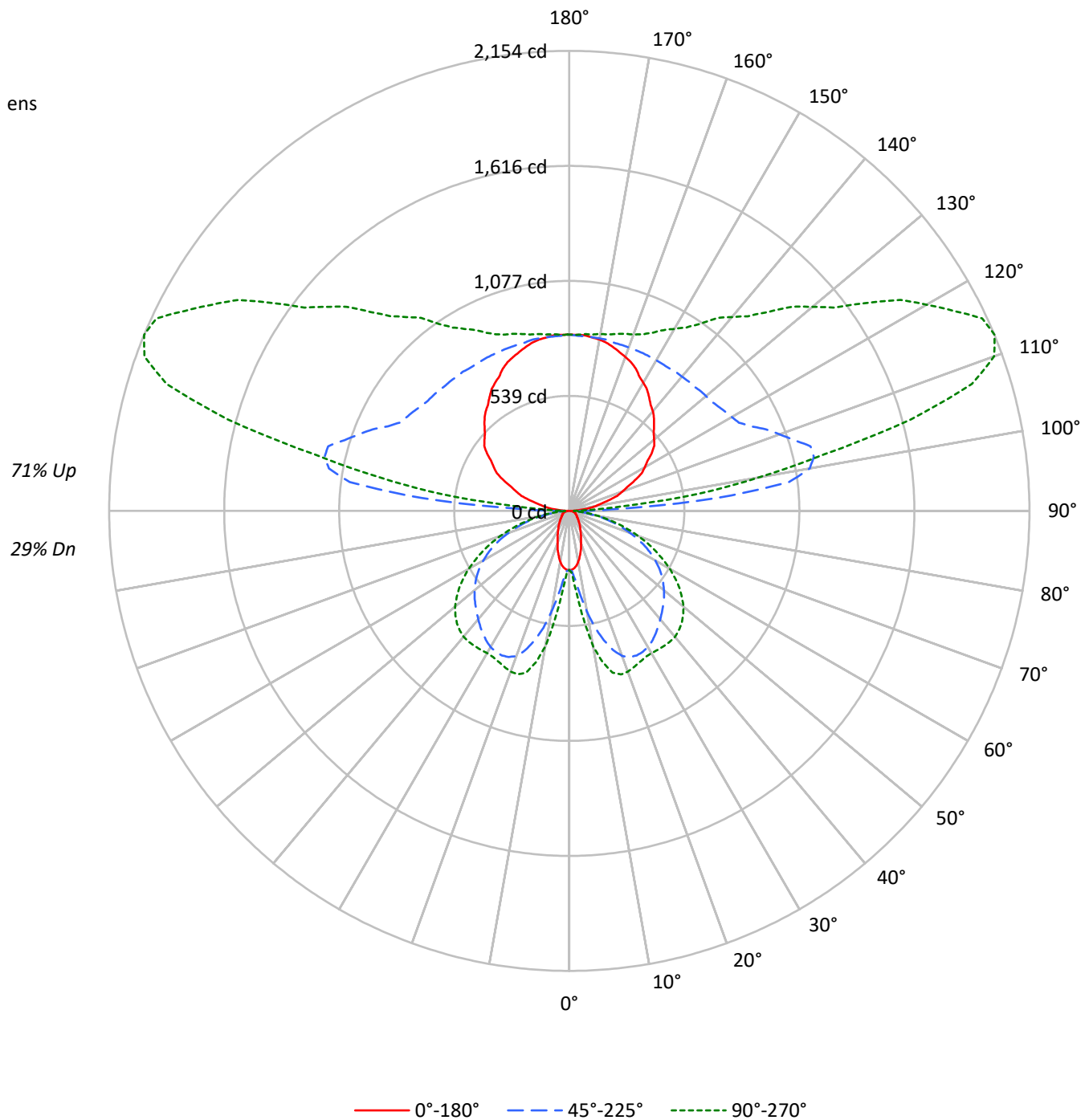
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7489.3 lumens
Efficiency: N/A
Efficacy: 117.8 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: P938374
CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P938374

CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29			
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19			
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13			
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6			
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2563	2563	2563
5°	2501	2960	3445
10°	2266	4311	5710
15°	1924	5628	6895
20°	1564	6517	7028
25°	1304	6815	6885
30°	1097	6853	6872
35°	969	6734	7050
40°	842	6580	7233
45°	762	6466	7261
50°	697	6363	7141
55°	665	6213	6825
60°	680	5932	6324
65°	702	5509	5638
70°	744	4795	4763
75°	817	3899	3717
80°	871	2694	2504
85°	737	1423	1282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7261 cd/sqm



TEST NUMBER: P938374

CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.7	0.5
10°-20°	158.3	2.1
20°-30°	276.9	3.7
30°-40°	356.5	4.8
40°-50°	398.2	5.3
50°-60°	381.4	5.1
60°-70°	302.2	4.0
70°-80°	177.7	2.4
80°-90°	52.5	0.7
90°-100°	402.3	5.4
100°-110°	1057.6	14.1
110°-120°	1096.6	14.6
120°-130°	879.6	11.7
130°-140°	690.2	9.2
140°-150°	529.7	7.1
150°-160°	381.5	5.1
160°-170°	233.4	3.1
170°-180°	78.9	1.1
0°-30°	471.0	6.3
0°-40°	827.5	11.0
0°-60°	1607.1	21.5
0°-90°	2139.6	28.6
90°-120°	2556.5	34.1
90°-150°	4656.0	62.2
90°-180°	5350.0	71.4
0°-180°	7489.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	276	276	276	276	276	
5°	269	289	325	368	381	25
15°	202	372	627	760	784	56
25°	129	422	747	780	781	59
35°	87	403	703	743	773	54
45°	60	322	622	712	744	46
55°	43	204	528	613	630	39
65°	34	108	392	440	447	33
75°	25	67	215	236	237	26
85°	9	20	53	59	60	9
90°	6	16	42	21	21	5
95°	53	208	693	357	243	59
105°	191	289	1169	1775	1656	202
115°	338	411	937	1868	2132	334
125°	471	528	852	1439	1698	418
135°	561	618	825	1162	1318	434
145°	651	692	815	991	1069	408
155°	736	756	815	894	920	338
165°	794	804	815	847	857	224
175°	825	825	820	831	831	78
180°	825	825	825	825	825	



TEST NUMBER: P938374
 CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2	276.2
2.5°	276.2	276.2	277.9	278.8	280.6	281.5	283.3	285.0	290.4	291.3	293.0
5°	269.1	272.6	284.2	288.6	301.0	317.9	325.0	336.6	360.5	367.6	372.1
7.5°	258.4	266.4	294.8	301.9	333.0	377.4	396.0	420.9	459.1	477.7	492.8
10°	241.5	258.4	309.0	325.9	376.5	444.0	478.6	513.3	571.0	596.7	606.5
12.5°	222.9	250.4	324.1	347.2	420.0	518.6	560.3	598.5	664.2	698.9	704.2
15°	201.6	238.9	338.3	372.1	466.2	580.8	626.9	674.0	735.3	760.1	766.3
17.5°	182.9	230.0	351.6	387.2	501.7	636.7	683.8	722.8	772.6	789.4	793.9
20°	159.8	215.8	360.5	406.7	539.0	677.5	722.8	753.0	786.8	797.4	799.2
22.5°	143.0	200.7	365.9	413.8	563.9	702.4	740.6	764.6	787.7	791.2	792.1
25°	128.8	183.8	365.0	421.8	585.2	717.5	746.8	764.6	777.9	779.7	779.7
27.5°	115.4	165.2	361.4	423.6	601.2	721.1	744.1	756.6	762.8	766.3	766.3
30°	103.9	147.4	352.5	420.0	608.3	717.5	736.2	742.4	748.6	753.9	756.6
32.5°	95.0	130.5	339.2	412.9	609.2	708.6	721.9	725.5	734.4	746.8	751.2
35°	87.0	113.7	324.1	403.2	603.8	694.4	703.3	706.8	724.6	743.3	749.5
37.5°	79.0	101.2	304.6	386.3	595.8	677.5	683.8	690.0	717.5	739.7	746.8
40°	71.0	90.6	281.5	367.6	583.4	657.1	662.4	672.2	708.6	734.4	741.5
42.5°	64.8	81.7	256.6	348.1	567.4	634.0	642.0	656.2	698.0	725.5	733.5
45°	59.5	72.8	230.0	321.5	547.0	610.1	621.6	641.1	685.5	712.2	719.3
47.5°	54.2	66.6	202.5	293.9	524.8	586.1	601.2	623.4	668.7	694.4	700.6
50°	49.7	60.4	174.9	264.6	500.8	560.3	578.1	601.2	647.4	671.3	679.3
52.5°	46.2	55.1	149.2	235.3	473.3	533.7	554.1	578.1	621.6	644.7	650.0
55°	42.6	50.6	127.0	204.2	444.9	505.3	527.5	550.6	593.2	612.7	616.3
57.5°	40.8	47.1	108.3	174.9	414.7	473.3	498.2	519.5	559.4	574.5	578.1
60°	38.2	44.4	94.1	150.1	381.8	443.1	464.4	485.7	519.5	531.9	534.6
62.5°	35.5	42.6	83.5	126.1	348.1	407.6	428.9	448.4	476.9	485.7	489.3
65°	33.7	40.8	75.5	108.3	313.5	370.3	391.6	408.5	431.6	440.4	442.2
67.5°	32.0	39.1	69.3	93.2	278.8	333.0	349.0	365.0	382.7	391.6	392.5
70°	29.3	37.3	63.9	82.6	243.3	290.4	303.7	320.6	334.8	339.2	341.9
72.5°	27.5	34.6	60.4	74.6	206.9	249.5	262.0	271.7	284.2	288.6	288.6
75°	24.9	31.1	56.8	66.6	169.6	204.2	214.9	224.7	234.4	236.2	233.5
77.5°	22.2	27.5	48.8	55.9	132.3	161.6	170.5	175.8	183.8	185.6	186.5
80°	18.6	24.0	38.2	43.5	95.9	119.0	125.2	129.6	136.8	136.8	138.5
82.5°	14.2	18.6	27.5	31.1	64.8	81.7	87.0	89.7	94.1	94.1	94.1
85°	8.9	11.5	17.8	20.4	39.1	49.7	53.3	54.2	57.7	58.6	58.6
87.5°	4.4	6.2	11.5	12.4	20.4	25.8	25.8	27.5	27.5	26.6	25.8
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°	22.1	59.8	97.5	106.9	150.2	208.1	237.0	207.7	149.2	105.2	101.1
95°	53.2	122.1	191.0	208.2	369.8	585.2	692.9	618.3	469.1	357.2	344.5
97.5°	91.9	152.7	213.6	228.7	498.1	857.3	1036.8	989.7	895.4	824.7	800.5
100°	121.8	177.0	232.1	245.9	544.8	943.3	1142.6	1146.1	1153.0	1158.1	1129.4
102.5°	147.3	198.8	250.2	263.1	566.3	970.4	1172.5	1232.5	1352.7	1442.8	1418.2
105°	190.6	234.2	277.7	288.6	582.1	973.4	1169.1	1303.8	1573.1	1775.1	1761.9
107.5°	234.9	275.5	316.1	326.3	585.1	930.2	1102.7	1290.5	1666.2	1947.9	1951.1
110°	264.7	301.4	338.2	347.3	580.7	891.7	1047.3	1257.3	1677.3	1992.2	2006.0



TEST NUMBER: P938374

CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	294.1	329.1	364.1	372.8	580.8	858.3	997.0	1211.9	1641.6	1964.0	1985.1
115°	338.4	370.7	402.9	411.0	586.2	819.8	936.6	1143.6	1557.6	1868.2	1897.6
117.5°	382.2	411.5	440.8	448.1	597.1	795.7	895.0	1081.9	1455.5	1735.8	1768.4
120°	407.6	435.2	462.7	469.7	605.9	787.6	878.4	1049.1	1390.5	1646.6	1678.2
122.5°	432.5	460.3	488.2	495.1	618.7	783.4	865.7	1019.4	1326.8	1557.5	1588.6
125°	470.8	496.1	521.5	527.8	635.8	779.8	851.9	982.4	1243.6	1439.4	1468.2
127.5°	501.8	527.4	553.0	559.4	652.9	777.8	840.2	952.4	1176.6	1344.8	1369.0
130°	518.4	545.9	573.5	580.4	665.6	779.0	835.8	935.6	1135.2	1284.9	1307.3
132.5°	535.6	563.2	590.7	597.6	675.7	779.8	831.9	921.2	1100.0	1234.0	1254.0
135°	561.0	586.2	611.2	617.5	686.8	779.0	825.2	900.1	1049.7	1161.9	1179.3
137.5°	587.1	611.9	636.8	643.0	703.4	783.9	824.2	887.4	1013.9	1108.8	1123.0
140°	608.7	631.6	654.5	660.2	713.6	784.7	820.2	874.9	984.2	1066.1	1079.4
142.5°	625.3	646.5	667.6	672.9	722.0	787.5	820.2	868.3	964.3	1036.3	1047.7
145°	650.8	669.3	687.7	692.3	733.1	787.6	814.7	854.0	932.5	991.4	1000.0
147.5°	676.2	694.2	712.2	716.7	749.4	793.0	814.7	845.6	907.4	953.7	960.8
150°	692.9	709.2	725.3	729.4	757.8	795.7	814.7	840.8	893.0	932.1	937.9
152.5°	710.0	722.4	734.6	737.8	763.4	797.6	814.7	837.0	881.6	915.0	919.3
155°	735.5	744.7	753.7	756.0	775.6	801.7	814.7	832.5	867.9	894.5	897.4
157.5°	754.4	763.2	772.0	774.2	787.7	805.8	814.7	828.5	856.0	876.7	878.8
160°	767.1	774.0	780.9	782.6	793.3	807.6	814.7	826.6	850.2	867.8	869.0
162.5°	779.8	785.0	790.1	791.5	799.2	809.6	814.7	824.7	844.7	859.6	860.6
165°	793.7	798.3	803.0	804.2	807.7	812.4	814.7	821.8	836.1	846.8	848.0
167.5°	806.4	808.6	810.8	811.4	814.3	818.3	820.2	825.0	834.3	841.3	841.8
170°	814.7	817.0	819.2	819.7	819.9	820.2	820.2	825.0	834.3	841.3	841.3
172.5°	819.2	819.6	820.2	820.2	820.2	820.2	820.2	824.0	831.3	836.9	836.4
175°	825.2	825.2	825.2	825.2	823.5	821.3	820.2	822.6	827.3	830.8	830.8
177.5°	825.2	825.2	825.2	825.2	824.0	822.3	821.4	823.3	826.9	829.7	829.1
180°	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2	825.2



TEST NUMBER: P938374

CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	276.2	276.2
2.5°	294.8	293.0
5°	379.2	381.0
7.5°	510.6	509.7
10°	634.9	642.9
12.5°	725.5	727.3
15°	780.6	784.1
17.5°	801.9	802.8
20°	802.8	801.0
22.5°	793.0	791.2
25°	781.4	780.6
27.5°	770.8	771.7
30°	766.3	769.0
32.5°	766.3	770.8
35°	768.1	772.6
37.5°	767.2	772.6
40°	763.7	769.9
42.5°	753.9	758.4
45°	738.8	744.1
47.5°	719.3	722.8
50°	694.4	698.0
52.5°	663.3	664.2
55°	626.0	629.6
57.5°	586.1	587.0
60°	541.7	544.3
62.5°	494.6	494.6
65°	444.9	446.7
67.5°	393.4	397.8
70°	341.0	341.9
72.5°	289.5	289.5
75°	236.2	237.1
77.5°	185.6	185.6
80°	137.6	138.5
82.5°	95.0	96.8
85°	59.5	59.5
87.5°	27.5	24.9
90°	21.0	21.0
92.5°	84.3	67.6
95°	293.8	243.1
97.5°	704.1	607.6
100°	1014.5	899.5
102.5°	1319.7	1221.3
105°	1709.0	1656.0
107.5°	1963.9	1976.7
110°	2061.1	2116.3



TEST NUMBER: P938374

CATALOG NUMBER: SQ4-FB-150U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2069.8	2154.5
115°	2015.0	2132.4
117.5°	1898.5	2028.7
120°	1804.8	1931.3
122.5°	1713.5	1838.2
125°	1583.1	1698.1
127.5°	1466.0	1563.0
130°	1396.9	1486.5
132.5°	1334.2	1414.5
135°	1248.4	1317.6
137.5°	1179.6	1236.2
140°	1132.3	1185.2
142.5°	1093.2	1138.7
145°	1034.5	1069.0
147.5°	989.4	1018.0
150°	961.1	984.2
152.5°	936.8	954.2
155°	909.0	920.5
157.5°	886.8	895.0
160°	873.7	878.4
162.5°	865.1	869.5
165°	852.7	857.4
167.5°	843.8	845.7
170°	841.3	841.3
172.5°	834.7	833.0
175°	830.8	830.8
177.5°	827.2	825.2
180°	825.2	825.2



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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	1.87	2.59	2.99	3.70	5.25	15.01	15.73	16.13	16.84	18.39
	3H	2.57	3.21	3.69	4.33	5.89	16.82	17.46	17.95	18.59	20.15
	4H	2.86	3.47	3.99	4.59	6.16	17.45	18.06	18.59	19.18	20.75
	6H	3.10	3.66	4.24	4.79	6.37	17.86	18.42	19.00	19.55	21.13
	8H	3.16	3.70	4.31	4.84	6.41	17.97	18.51	19.12	19.65	21.22
	12H	3.18	3.68	4.33	4.82	6.41	18.03	18.54	19.18	19.67	21.26
4H	2H	9.04	9.65	10.19	10.78	12.34	15.27	15.88	16.41	17.00	18.57
	3H	10.60	11.11	11.75	12.26	13.84	17.28	17.80	18.43	18.94	20.52
	4H	10.69	11.16	11.84	12.30	13.89	18.03	18.50	19.19	19.64	21.24
	6H	10.69	11.09	11.85	12.25	13.84	18.55	18.96	19.71	20.12	21.71
	8H	10.66	11.04	11.82	12.19	13.80	18.70	19.08	19.86	20.23	21.84
	12H	10.61	10.95	11.79	12.12	13.73	18.78	19.12	19.95	20.29	21.90
8H	4H	12.11	12.49	13.27	13.64	15.25	18.08	18.46	19.24	19.61	21.22
	6H	12.35	12.66	13.52	13.85	15.45	18.69	19.00	19.87	20.20	21.80
	8H	12.36	12.63	13.54	13.81	15.43	18.90	19.17	20.09	20.35	21.97
	12H	12.32	12.56	13.51	13.73	15.39	19.03	19.27	20.22	20.44	22.10
12H	4H	12.24	12.58	13.42	13.75	15.36	18.03	18.37	19.20	19.53	21.15
	6H	12.60	12.87	13.78	14.04	15.67	18.67	18.95	19.86	20.12	21.74
	8H	12.66	12.90	13.85	14.07	15.73	18.89	19.13	20.08	20.30	21.95