

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: P937836

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

**Test Information**

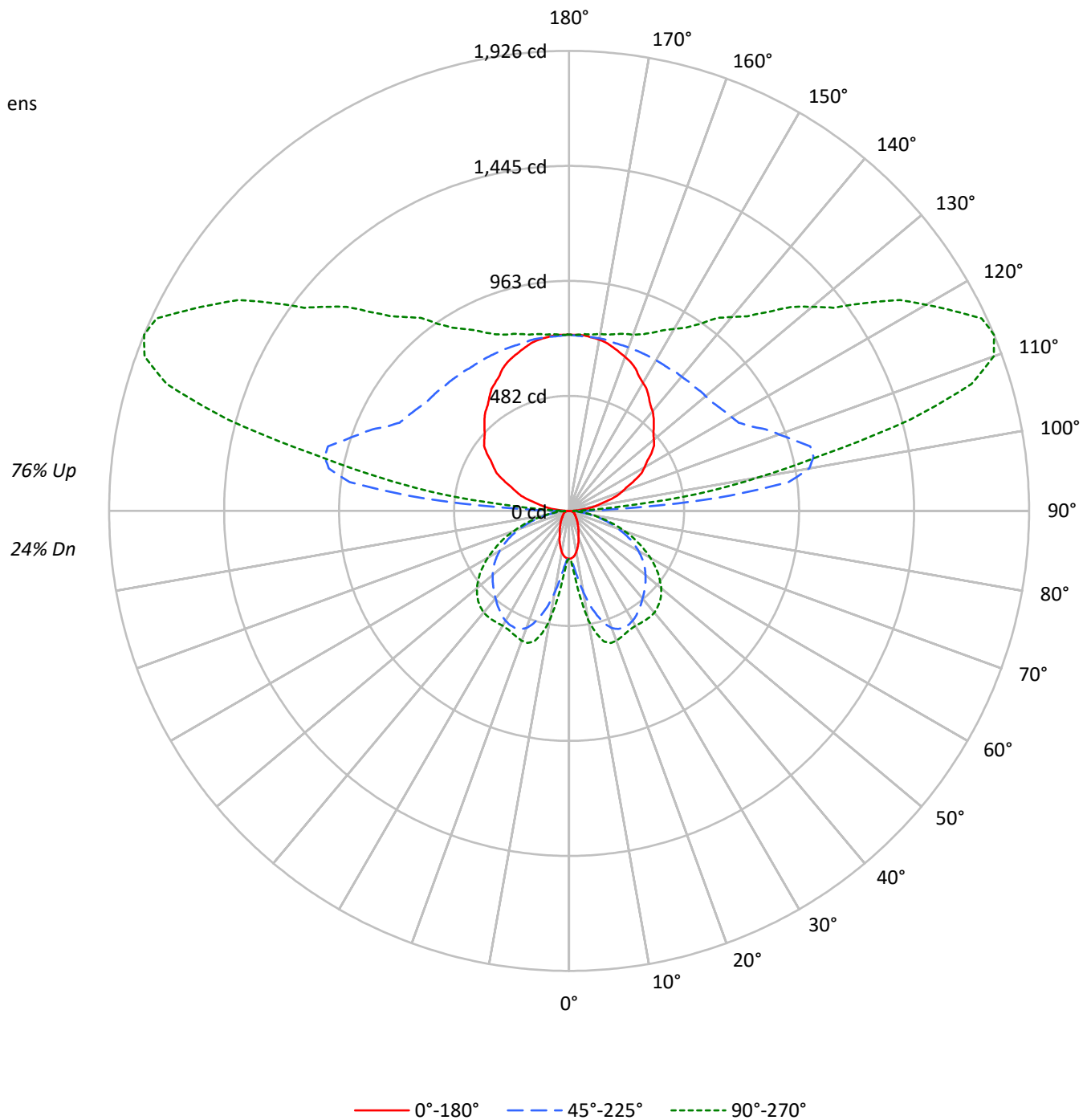
Test Method: LM-79-2019  
Report Number: P937836  
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-4-6500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6328.1 lumens  
Efficiency: N/A  
Efficacy: 132.9 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): 47.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P937836  
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### 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1851	1851	1851
5°	1807	2137	2488
10°	1637	3115	4125
15°	1389	4066	4981
20°	1130	4708	5076
25°	941	4923	4974
30°	793	4950	4964
35°	699	4864	5092
40°	609	4754	5224
45°	549	4671	5246
50°	505	4596	5159
55°	481	4488	4930
60°	489	4285	4569
65°	508	3978	4072
70°	536	3464	3441
75°	590	2816	2685
80°	632	1948	1810
85°	530	1028	924

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5246 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.8	0.4
10°-20°	114.4	1.8
20°-30°	200.1	3.2
30°-40°	257.5	4.1
40°-50°	287.7	4.5
50°-60°	275.5	4.4
60°-70°	218.3	3.5
70°-80°	128.4	2.0
80°-90°	38.5	0.6
90°-100°	359.6	5.7
100°-110°	945.4	14.9
110°-120°	980.2	15.5
120°-130°	786.3	12.4
130°-140°	616.9	9.7
140°-150°	473.5	7.5
150°-160°	341.0	5.4
160°-170°	208.7	3.3
170°-180°	70.5	1.1
0°-30°	340.2	5.4
0°-40°	597.8	9.4
0°-60°	1160.9	18.3
0°-90°	1546.1	24.4
90°-120°	2285.1	36.1
90°-150°	4161.8	65.8
90°-180°	4782.0	75.6
0°-180°	6328.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	200	200	200	200	200	
5°	194	208	235	266	275	18
15°	146	269	453	549	566	41
25°	93	305	540	563	564	43
35°	63	291	508	537	558	39
45°	43	232	449	514	538	33
55°	31	148	381	443	455	28
65°	24	78	283	318	323	24
75°	18	48	155	171	171	19
85°	6	15	38	42	43	7
90°	5	14	38	19	19	5
95°	48	186	619	319	217	53
105°	170	258	1045	1587	1480	181
115°	302	367	837	1670	1906	299
125°	421	472	761	1287	1518	374
135°	502	552	738	1039	1178	388
145°	582	619	728	886	956	364
155°	658	676	728	800	823	302
165°	709	719	728	757	766	200
175°	738	738	733	743	743	70
180°	738	738	738	738	738	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5
2.5°	199.5	199.5	200.8	201.4	202.7	203.4	204.6	205.9	209.8	210.4	211.7
5°	194.4	197.0	205.3	208.5	217.4	229.7	234.7	243.2	260.5	265.5	268.8
7.5°	186.6	192.5	212.9	218.1	240.6	272.6	286.1	304.1	331.6	345.1	356.0
10°	174.5	186.6	223.3	235.4	271.9	320.7	345.8	370.8	412.5	431.1	438.1
12.5°	161.0	180.9	234.2	250.8	303.4	374.6	404.8	432.4	479.8	504.9	508.7
15°	145.6	172.6	244.4	268.8	336.8	419.5	452.9	486.9	531.2	549.0	553.5
17.5°	132.1	166.2	254.1	279.7	362.4	459.9	494.0	522.2	558.0	570.3	573.4
20°	115.5	155.9	260.5	293.8	389.4	489.5	522.2	544.0	568.4	576.0	577.3
22.5°	103.3	145.0	264.3	298.9	407.3	507.4	535.0	552.3	568.9	571.5	572.2
25°	93.0	132.8	263.6	304.7	422.7	518.3	539.5	552.3	562.0	563.2	563.2
27.5°	83.4	119.3	261.0	306.0	434.3	520.8	537.6	546.6	551.1	553.5	553.5
30°	75.1	106.5	254.6	303.4	439.4	518.3	531.7	536.2	540.7	544.6	546.6
32.5°	68.7	94.3	245.1	298.2	440.0	511.9	521.5	524.1	530.5	539.5	542.6
35°	62.8	82.1	234.2	291.3	436.2	501.6	508.0	510.6	523.4	536.9	541.4
37.5°	57.1	73.1	220.0	279.0	430.4	489.5	494.0	498.5	518.3	534.3	539.5
40°	51.3	65.4	203.4	265.5	421.5	474.7	478.6	485.6	511.9	530.5	535.7
42.5°	46.9	59.0	185.4	251.5	409.9	458.0	463.8	474.1	504.2	524.1	529.8
45°	42.9	52.6	166.2	232.2	395.1	440.7	449.0	463.2	495.2	514.4	519.6
47.5°	39.1	48.1	146.3	212.4	379.1	423.4	434.3	450.3	483.1	501.6	506.1
50°	36.0	43.6	126.4	191.1	361.8	404.8	417.6	434.3	467.7	485.0	490.7
52.5°	33.4	39.8	107.8	170.0	341.9	385.5	400.3	417.6	449.0	465.7	469.6
55°	30.8	36.5	91.7	147.5	321.4	365.0	381.0	397.7	428.5	442.6	445.2
57.5°	29.5	34.0	78.2	126.4	299.6	341.9	359.8	375.2	404.1	415.0	417.6
60°	27.5	32.0	68.0	108.4	275.9	320.1	335.5	350.9	375.2	384.2	386.2
62.5°	25.6	30.8	60.3	91.1	251.5	294.4	309.8	324.0	344.4	350.9	353.4
65°	24.4	29.5	54.5	78.2	226.4	267.4	282.8	295.1	311.7	318.1	319.5
67.5°	23.1	28.2	50.0	67.3	201.4	240.6	252.1	263.6	276.4	282.8	283.5
70°	21.1	27.0	46.2	59.7	175.7	209.8	219.4	231.6	241.8	245.1	247.0
72.5°	19.9	25.1	43.6	53.9	149.5	180.2	189.2	196.3	205.3	208.5	208.5
75°	18.0	22.5	41.0	48.1	122.5	147.5	155.2	162.3	169.3	170.6	168.7
77.5°	16.1	19.9	35.3	40.4	95.6	116.8	123.2	127.0	132.8	134.1	134.7
80°	13.5	17.3	27.5	31.5	69.3	86.0	90.5	93.6	98.8	98.8	100.1
82.5°	10.2	13.5	19.9	22.5	46.9	59.0	62.8	64.8	68.0	68.0	68.0
85°	6.4	8.3	12.8	14.7	28.2	36.0	38.5	39.1	41.7	42.4	42.4
87.5°	3.3	4.5	8.3	9.0	14.7	18.6	18.6	19.9	19.9	19.2	18.6
90°	5.0	8.9	12.9	13.9	21.8	32.3	37.6	33.4	25.1	18.8	18.8
92.5°	19.8	53.5	87.1	95.5	134.3	186.1	211.9	185.7	133.4	94.1	90.4
95°	47.5	109.1	170.8	186.2	330.6	523.0	619.3	552.7	419.4	319.4	308.0
97.5°	82.1	136.4	190.9	204.4	445.2	766.2	926.7	884.6	800.3	737.1	715.6
100°	108.9	158.2	207.5	219.8	487.0	843.2	1021.3	1024.4	1030.6	1035.2	1009.5
102.5°	131.7	177.7	223.7	235.1	506.1	867.5	1048.1	1101.8	1209.2	1289.7	1267.7
105°	170.3	209.3	248.2	258.0	520.4	870.2	1045.1	1165.5	1406.2	1586.7	1574.8
107.5°	209.9	246.2	282.6	291.6	523.0	831.5	985.7	1153.6	1489.4	1741.1	1744.0
110°	236.7	269.5	302.2	310.4	519.0	797.2	936.2	1123.9	1499.3	1780.8	1793.1



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CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-4-6500K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	262.9	294.1	325.3	333.1	519.1	767.2	891.2	1083.3	1467.5	1755.6	1774.5
115°	302.4	331.3	360.2	367.4	524.0	732.7	837.1	1022.2	1392.3	1669.9	1696.1
117.5°	341.6	367.8	394.0	400.5	533.7	711.3	800.0	967.0	1301.0	1551.5	1580.6
120°	364.4	389.1	413.7	419.9	541.7	704.0	785.2	937.8	1243.0	1471.9	1500.2
122.5°	386.7	411.5	436.4	442.6	553.1	700.2	773.8	911.3	1186.1	1392.1	1420.0
125°	420.8	443.5	466.1	471.8	568.4	697.1	761.4	878.2	1111.6	1286.7	1312.4
127.5°	448.6	471.4	494.3	500.0	583.7	695.2	751.0	851.2	1051.7	1202.0	1223.7
130°	463.4	488.0	512.7	518.8	594.9	696.4	747.1	836.3	1014.7	1148.6	1168.6
132.5°	478.8	503.4	528.1	534.2	604.0	697.1	743.6	823.5	983.3	1103.1	1120.9
135°	501.5	524.0	546.4	552.0	613.9	696.4	737.7	804.6	938.4	1038.7	1054.2
137.5°	524.8	546.9	569.2	574.8	628.7	700.7	736.7	793.2	906.3	991.1	1003.7
140°	544.1	564.5	585.0	590.2	637.9	701.5	733.2	782.1	879.8	953.0	964.9
142.5°	558.9	577.8	596.8	601.5	645.4	703.9	733.2	776.1	861.9	926.3	936.4
145°	581.7	598.2	614.7	618.8	655.3	703.9	728.2	763.3	833.5	886.2	893.9
147.5°	604.5	620.6	636.6	640.6	669.8	708.7	728.2	755.9	811.1	852.5	858.9
150°	619.3	633.9	648.4	652.0	677.5	711.3	728.2	751.6	798.2	833.2	838.4
152.5°	634.7	645.7	656.7	659.5	682.4	712.9	728.2	748.1	788.0	817.8	821.8
155°	657.5	665.6	673.7	675.7	693.2	716.6	728.2	744.1	775.8	799.6	802.2
157.5°	674.3	682.2	690.1	692.1	704.1	720.2	728.2	740.6	765.2	783.7	785.5
160°	685.7	691.8	698.0	699.6	709.1	721.8	728.2	738.8	759.9	775.8	776.8
162.5°	697.1	701.7	706.3	707.5	714.4	723.6	728.2	737.1	755.0	768.4	769.4
165°	709.4	713.6	717.8	718.9	722.0	726.1	728.2	734.6	747.4	756.9	758.0
167.5°	720.9	722.8	724.8	725.3	727.9	731.5	733.2	737.4	745.7	752.0	752.5
170°	728.2	730.2	732.3	732.7	732.9	733.1	733.2	737.4	745.7	752.0	752.0
172.5°	732.3	732.6	733.1	733.2	733.2	733.2	733.2	736.5	743.1	748.0	747.6
175°	737.7	737.7	737.7	737.7	736.2	734.2	733.2	735.3	739.4	742.6	742.6
177.5°	737.7	737.7	737.7	737.7	736.6	734.9	734.2	735.8	739.1	741.6	741.1
180°	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	199.5	199.5
2.5°	212.9	211.7
5°	273.9	275.2
7.5°	368.8	368.2
10°	458.7	464.4
12.5°	524.1	525.3
15°	563.9	566.4
17.5°	579.3	579.9
20°	579.9	578.6
22.5°	572.9	571.5
25°	564.5	563.9
27.5°	556.8	557.5
30°	553.5	555.5
32.5°	553.5	556.8
35°	554.9	558.0
37.5°	554.2	558.0
40°	551.6	556.1
42.5°	544.6	547.8
45°	533.7	537.6
47.5°	519.6	522.2
50°	501.6	504.2
52.5°	479.1	479.8
55°	452.3	454.8
57.5°	423.4	424.0
60°	391.3	393.2
62.5°	357.3	357.3
65°	321.4	322.6
67.5°	284.2	287.3
70°	246.3	247.0
72.5°	209.1	209.1
75°	170.6	171.3
77.5°	134.1	134.1
80°	99.4	100.1
82.5°	68.7	69.9
85°	42.9	42.9
87.5°	19.9	18.0
90°	18.8	18.8
92.5°	75.3	60.4
95°	262.7	217.3
97.5°	629.4	543.1
100°	906.8	804.0
102.5°	1179.7	1091.7
105°	1527.6	1480.3
107.5°	1755.5	1766.9
110°	1842.4	1891.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1850.1	1925.9
115°	1801.1	1906.1
117.5°	1697.1	1813.4
120°	1613.2	1726.3
122.5°	1531.5	1643.1
125°	1415.1	1517.9
127.5°	1310.4	1397.1
130°	1248.7	1328.8
132.5°	1192.7	1264.4
135°	1116.0	1177.7
137.5°	1054.4	1105.0
140°	1012.1	1059.5
142.5°	977.1	1017.9
145°	924.7	955.5
147.5°	884.4	909.9
150°	859.1	879.8
152.5°	837.3	853.0
155°	812.5	822.8
157.5°	792.8	800.0
160°	781.0	785.2
162.5°	773.4	777.3
165°	762.2	766.4
167.5°	754.2	756.0
170°	752.0	752.0
172.5°	746.1	744.6
175°	742.6	742.6
177.5°	739.4	737.7
180°	737.7	737.7



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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	0.11	0.80	1.26	1.94	3.53	13.26	13.94	14.40	15.08	16.67
	3H	0.81	1.42	1.96	2.57	4.18	15.07	15.68	16.22	16.83	18.44
	4H	1.10	1.68	2.26	2.83	4.44	15.69	16.28	16.85	17.42	19.04
	6H	1.34	1.88	2.51	3.03	4.65	16.10	16.64	17.27	17.79	19.41
	8H	1.40	1.92	2.58	3.08	4.70	16.21	16.72	17.38	17.89	19.50
	12H	1.42	1.90	2.59	3.06	4.70	16.27	16.75	17.44	17.91	19.55
4H	2H	7.28	7.87	8.45	9.01	10.63	13.51	14.10	14.68	15.24	16.85
	3H	8.84	9.33	10.01	10.50	12.12	15.52	16.01	16.70	17.18	18.81
	4H	8.93	9.38	10.10	10.54	12.18	16.27	16.72	17.45	17.88	19.53
	6H	8.93	9.31	10.11	10.49	12.13	16.79	17.18	17.97	18.36	19.99
	8H	8.90	9.26	10.08	10.43	12.08	16.94	17.30	18.12	18.47	20.12
	12H	8.85	9.17	10.04	10.36	12.01	17.02	17.34	18.21	18.53	20.18
8H	4H	10.35	10.71	11.53	11.88	13.53	16.32	16.68	17.50	17.85	19.50
	6H	10.58	10.88	11.78	12.09	13.74	16.93	17.23	18.13	18.44	20.09
	8H	10.60	10.85	11.80	12.05	13.72	17.14	17.40	18.34	18.59	20.26
	12H	10.56	10.78	11.76	11.97	13.67	17.26	17.49	18.47	18.68	20.38
12H	4H	10.48	10.80	11.67	11.99	13.64	16.26	16.59	17.46	17.77	19.43
	6H	10.83	11.09	12.04	12.28	13.95	16.91	17.17	18.11	18.36	20.03
	8H	10.89	11.12	12.10	12.31	14.01	17.12	17.35	18.33	18.54	20.24