

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: P936687

Luminaire Tested: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936687
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

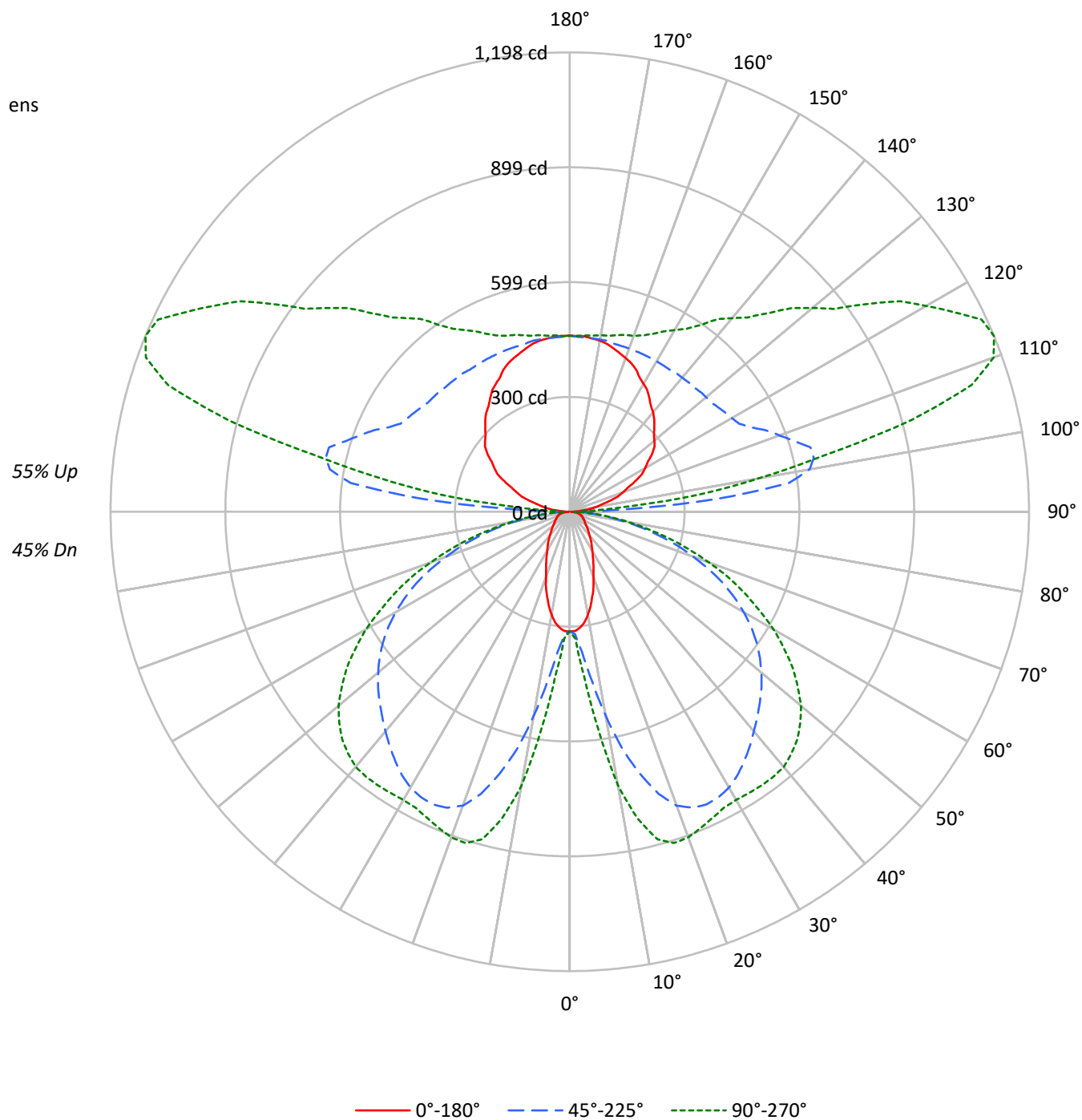
Lumens per Lamp: N/A
Luminaire Lumens: 5386.4 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 42.6
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: P936687

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-2700K

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
RCR																				
0	106	106	106	106	97	97	97	97		80	80	80		65	65	65		51	51	51
1	96	92	88	84	88	84	81	77		70	67	65		57	55	53		45	43	42
2	87	79	73	68	79	73	67	63		60	56	53		49	46	44		39	37	35
3	79	69	62	56	72	64	57	52		53	48	44		43	39	36		34	31	29
4	72	61	53	47	66	56	49	43		47	41	37		38	34	31		30	27	24
5	66	54	46	39	60	50	42	37		41	36	31		34	29	26		26	23	21
6	60	48	40	34	55	44	37	31		37	31	27		30	26	22		24	21	18
7	56	43	35	29	51	40	32	27		33	28	23		27	23	20		21	18	16
8	51	39	31	26	47	36	29	24		30	25	21		25	20	17		20	16	14
9	48	35	28	23	44	33	26	21		27	22	18		23	18	15		18	15	12
10	45	32	25	20	41	30	23	19		25	20	16		21	17	14		17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1927	1927	1927
5°	1883	2227	2591
10°	1707	3246	4295
15°	1450	4239	5186
20°	1180	4912	5286
25°	984	5138	5179
30°	829	5170	5168
35°	733	5082	5302
40°	639	4970	5440
45°	577	4886	5461
50°	529	4811	5371
55°	507	4702	5133
60°	518	4494	4757
65°	537	4177	4240
70°	572	3640	3583
75°	632	2965	2796
80°	684	2053	1884
85°	602	1090	964

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5461 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.3	0.7
10°-20°	178.6	3.3
20°-30°	312.4	5.8
30°-40°	402.2	7.5
40°-50°	449.2	8.3
50°-60°	430.3	8.0
60°-70°	341.0	6.3
70°-80°	200.5	3.7
80°-90°	57.5	1.1
90°-100°	223.7	4.2
100°-110°	588.0	10.9
110°-120°	609.7	11.3
120°-130°	489.0	9.1
130°-140°	383.7	7.1
140°-150°	294.5	5.5
150°-160°	212.1	3.9
160°-170°	129.8	2.4
170°-180°	43.8	0.8
0°-30°	531.4	9.9
0°-40°	933.6	17.3
0°-60°	1813.1	33.7
0°-90°	2412.1	44.8
90°-120°	1421.3	26.4
90°-150°	2588.6	48.1
90°-180°	2974.0	55.2
0°-180°	5386.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	312	312	312	312	312	
5°	304	326	367	415	430	28
15°	227	420	707	858	885	63
25°	145	476	842	880	881	67
35°	98	455	793	838	872	61
45°	67	363	701	804	840	52
55°	48	230	595	691	710	44
65°	38	122	442	497	504	38
75°	28	75	242	266	268	29
85°	10	23	60	66	67	11
90°	3	9	23	12	12	3
95°	30	116	385	199	135	33
105°	106	160	650	987	921	112
115°	188	228	521	1039	1186	186
125°	262	293	474	800	944	232
135°	312	343	459	646	733	241
145°	362	385	453	551	594	227
155°	409	420	453	497	512	188
165°	441	447	453	471	477	125
175°	459	459	456	462	462	44
180°	459	459	459	459	459	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	311.5	311.5	311.5	311.5	311.5	311.5	311.5	311.5	311.5	311.5	311.5
2.5°	311.5	311.5	313.5	314.5	316.6	317.6	319.6	321.6	327.6	328.6	330.6
5°	303.6	307.6	320.6	325.6	339.6	358.7	366.6	379.7	406.8	414.7	419.8
7.5°	291.5	300.6	332.6	340.6	375.7	425.8	446.8	474.9	517.9	539.0	556.1
10°	272.5	291.5	348.6	367.7	424.8	500.9	540.0	579.1	644.2	673.2	684.3
12.5°	251.5	282.6	365.6	391.7	473.9	585.1	632.2	675.3	749.4	788.4	794.4
15°	227.4	269.5	381.7	419.8	526.0	655.2	707.3	760.4	829.6	857.6	864.6
17.5°	206.4	259.5	396.7	436.8	566.0	718.3	771.4	815.5	871.6	890.6	895.6
20°	180.4	243.4	406.8	458.9	608.2	764.4	815.5	849.6	887.6	899.7	901.7
22.5°	161.3	226.4	412.7	466.8	636.1	792.4	835.5	862.5	888.6	892.6	893.6
25°	145.3	207.4	411.7	475.9	660.2	809.4	842.5	862.5	877.6	879.6	879.6
27.5°	130.3	186.4	407.8	477.9	678.3	813.5	839.5	853.6	860.5	864.6	864.6
30°	117.2	166.3	397.7	473.9	686.2	809.4	830.6	837.5	844.5	850.6	853.6
32.5°	107.2	147.3	382.7	465.8	687.2	799.5	814.5	818.5	828.5	842.5	847.6
35°	98.2	128.3	365.6	454.9	681.3	783.5	793.4	797.5	817.5	838.5	845.5
37.5°	89.1	114.2	343.6	435.8	672.2	764.4	771.4	778.5	809.4	834.5	842.5
40°	80.2	102.2	317.6	414.7	658.3	741.3	747.4	758.4	799.5	828.5	836.5
42.5°	73.1	92.1	289.5	392.7	640.1	715.3	724.3	740.3	787.4	818.5	827.5
45°	67.1	82.2	259.5	362.6	617.1	688.2	701.3	723.3	773.4	803.5	811.4
47.5°	61.2	75.1	228.4	331.6	592.1	661.2	678.3	703.3	754.4	783.5	790.4
50°	56.1	68.1	197.4	298.5	565.0	632.2	652.2	678.3	730.4	757.4	766.4
52.5°	52.1	62.2	168.3	265.5	534.0	602.1	625.2	652.2	701.3	727.4	733.4
55°	48.1	57.1	143.2	230.4	501.9	570.0	595.1	621.1	669.2	691.2	695.3
57.5°	46.1	53.1	122.2	197.4	467.8	534.0	562.0	586.0	631.2	648.2	652.2
60°	43.1	50.1	106.2	169.3	430.8	499.9	524.0	548.0	586.0	600.1	603.1
62.5°	40.0	48.1	94.2	142.2	392.7	459.9	483.9	506.0	537.9	548.0	552.0
65°	38.0	46.1	85.2	122.2	353.7	417.7	441.8	460.8	486.8	496.9	498.9
67.5°	36.1	44.1	78.2	105.2	314.5	375.7	393.7	411.7	431.8	441.8	442.8
70°	33.1	42.0	72.1	93.1	274.5	327.6	342.6	361.6	377.7	382.7	385.8
72.5°	31.1	39.0	68.1	84.2	233.5	281.5	295.5	306.6	320.6	325.6	325.6
75°	28.1	35.1	64.1	75.1	191.3	230.4	242.4	253.5	264.4	266.5	263.4
77.5°	25.0	31.1	55.1	63.1	149.3	182.4	192.3	198.4	207.4	209.4	210.4
80°	21.0	27.1	43.1	49.1	108.2	134.3	141.2	146.3	154.3	154.3	156.3
82.5°	16.0	21.0	31.1	35.1	73.1	92.1	98.2	101.2	106.2	106.2	106.2
85°	10.1	13.0	20.0	23.0	44.1	56.1	60.2	61.2	65.1	66.1	66.1
87.5°	5.0	7.0	13.0	14.0	23.0	29.1	29.1	31.1	31.1	30.1	29.1
90°	3.1	5.6	8.1	8.7	13.5	20.1	23.4	20.8	15.5	11.7	11.7
92.5°	12.4	33.3	54.2	59.5	83.6	115.7	131.8	115.4	82.9	58.5	56.2
95°	29.6	67.8	106.2	115.7	205.6	325.4	385.3	343.8	260.9	198.6	191.5
97.5°	51.1	85.0	118.7	127.2	277.0	476.7	576.5	550.3	497.8	458.5	445.0
100°	67.7	98.4	129.1	136.8	302.9	524.5	635.2	637.1	641.0	643.9	628.0
102.5°	81.9	110.6	139.1	146.3	314.8	539.5	651.9	685.2	752.1	802.2	788.5
105°	106.0	130.2	154.4	160.5	323.6	541.2	650.0	724.9	874.6	986.9	979.6
107.5°	130.6	153.2	175.7	181.4	325.3	517.1	613.0	717.4	926.3	1083.0	1084.7
110°	147.2	167.5	187.9	193.0	322.8	495.8	582.3	699.0	932.6	1107.7	1115.3

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	163.5	183.0	202.4	207.3	322.9	477.2	554.3	673.8	912.7	1091.9	1103.7
115°	188.1	206.1	224.0	228.5	325.9	455.8	520.7	635.8	866.0	1038.6	1055.0
117.5°	212.4	228.8	245.0	249.1	332.0	442.4	497.6	601.5	809.2	965.0	983.2
120°	226.6	241.9	257.3	261.2	336.8	437.8	488.3	583.3	773.1	915.4	933.1
122.5°	240.5	256.0	271.4	275.3	343.9	435.5	481.3	566.7	737.7	865.9	883.3
125°	261.7	275.8	289.9	293.4	353.5	433.6	473.6	546.2	691.4	800.3	816.2
127.5°	279.0	293.2	307.5	311.1	363.0	432.5	467.1	529.5	654.1	747.6	761.0
130°	288.2	303.6	318.9	322.7	370.0	433.1	464.6	520.1	631.2	714.4	726.9
132.5°	297.8	313.1	328.5	332.3	375.7	433.6	462.5	512.2	611.5	686.0	697.2
135°	311.9	325.9	339.8	343.3	381.9	433.2	458.9	500.5	583.7	646.0	655.7
137.5°	326.4	340.2	354.0	357.5	391.0	435.8	458.2	493.3	563.6	616.4	624.3
140°	338.4	351.2	363.8	367.0	396.7	436.2	456.1	486.4	547.2	592.7	600.1
142.5°	347.6	359.4	371.1	374.1	401.4	437.8	456.1	482.8	536.0	576.1	582.5
145°	361.8	372.1	382.4	385.0	407.7	437.8	453.0	474.8	518.4	551.2	556.0
147.5°	376.0	386.0	396.0	398.5	416.6	440.8	453.0	470.1	504.5	530.3	534.3
150°	385.3	394.3	403.3	405.6	421.4	442.4	453.0	467.5	496.5	518.2	521.4
152.5°	394.7	401.6	408.5	410.2	424.4	443.4	453.0	465.3	490.1	508.7	511.0
155°	409.0	414.0	419.0	420.3	431.2	445.7	453.0	462.8	482.6	497.3	498.9
157.5°	419.4	424.3	429.3	430.5	437.9	448.0	453.0	460.6	476.0	487.4	488.5
160°	426.5	430.3	434.1	435.1	441.0	449.0	453.0	459.6	472.7	482.6	483.2
162.5°	433.6	436.4	439.3	440.0	444.3	450.1	453.0	458.6	469.6	477.9	478.5
165°	441.2	443.8	446.4	447.1	449.1	451.7	453.0	457.0	464.8	470.8	471.5
167.5°	448.3	449.5	450.8	451.1	452.8	455.0	456.1	458.7	463.8	467.7	468.0
170°	453.0	454.2	455.5	455.8	455.9	456.0	456.1	458.7	463.8	467.7	467.7
172.5°	455.5	455.8	456.0	456.1	456.1	456.1	456.1	458.1	462.1	465.2	465.0
175°	458.9	458.9	458.9	458.9	458.0	456.7	456.1	457.4	460.0	461.8	461.8
177.5°	458.9	458.9	458.9	458.9	458.2	457.2	456.7	457.7	459.8	461.2	460.9
180°	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	311.5	311.5
2.5°	332.6	330.6
5°	427.8	429.8
7.5°	576.1	575.1
10°	716.3	725.3
12.5°	818.5	820.5
15°	880.7	884.6
17.5°	904.7	905.7
20°	905.7	903.7
22.5°	894.6	892.6
25°	881.7	880.7
27.5°	869.6	870.6
30°	864.6	867.6
32.5°	864.6	869.6
35°	866.6	871.6
37.5°	865.6	871.6
40°	861.5	868.6
42.5°	850.6	855.6
45°	833.6	839.5
47.5°	811.4	815.5
50°	783.5	787.4
52.5°	748.4	749.4
55°	706.3	710.3
57.5°	661.2	662.2
60°	611.1	614.1
62.5°	558.1	558.1
65°	501.9	503.9
67.5°	443.8	448.8
70°	384.8	385.8
72.5°	326.6	326.6
75°	266.5	267.5
77.5°	209.4	209.4
80°	155.3	156.3
82.5°	107.2	109.2
85°	67.1	67.1
87.5°	31.1	28.1
90°	11.7	11.7
92.5°	46.8	37.5
95°	163.3	135.2
97.5°	391.4	337.8
100°	564.0	500.1
102.5°	733.8	679.0
105°	950.2	920.7
107.5°	1091.8	1099.0
110°	1145.9	1176.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1150.8	1197.8
115°	1120.2	1185.5
117.5°	1055.6	1128.0
120°	1003.4	1073.8
122.5°	952.7	1022.0
125°	880.2	944.1
127.5°	815.0	869.0
130°	776.7	826.5
132.5°	741.8	786.4
135°	694.1	732.6
137.5°	655.9	687.3
140°	629.5	659.0
142.5°	607.8	633.1
145°	575.2	594.3
147.5°	550.1	565.9
150°	534.4	547.2
152.5°	520.8	530.6
155°	505.4	511.7
157.5°	493.1	497.6
160°	485.7	488.3
162.5°	481.0	483.5
165°	474.1	476.7
167.5°	469.1	470.2
170°	467.7	467.7
172.5°	464.0	463.1
175°	461.8	461.8
177.5°	460.0	458.9
180°	458.9	458.9

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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	2.78	3.63	3.78	4.64	5.98	15.95	16.80	16.94	17.81	19.15
	3H	3.49	4.25	4.49	5.27	6.63	17.78	18.55	18.79	19.57	20.93
	4H	3.79	4.51	4.80	5.53	6.90	18.42	19.15	19.44	20.17	21.54
	6H	4.04	4.70	5.06	5.73	7.11	18.85	19.52	19.88	20.54	21.93
	8H	4.10	4.74	5.14	5.78	7.16	18.97	19.60	20.00	20.65	22.03
	12H	4.12	4.73	5.16	5.76	7.17	19.03	19.64	20.07	20.68	22.08
4H	2H	9.99	10.71	11.01	11.74	13.10	16.22	16.95	17.25	17.97	19.34
	3H	11.56	12.16	12.59	13.21	14.60	18.26	18.87	19.29	19.92	21.30
	4H	11.65	12.21	12.69	13.25	14.65	19.03	19.58	20.06	20.62	22.03
	6H	11.66	12.14	12.71	13.21	14.61	19.56	20.04	20.61	21.10	22.50
	8H	11.64	12.09	12.69	13.14	14.56	19.72	20.17	20.77	21.22	22.64
	12H	11.59	12.00	12.66	13.07	14.49	19.81	20.21	20.88	21.29	22.71
8H	4H	13.09	13.54	14.14	14.60	16.01	19.09	19.53	20.14	20.59	22.01
	6H	13.33	13.70	14.41	14.80	16.22	19.71	20.08	20.78	21.18	22.59
	8H	13.35	13.68	14.43	14.76	16.19	19.93	20.25	21.01	21.34	22.77
	12H	13.32	13.61	14.41	14.69	16.16	20.07	20.35	21.15	21.43	22.91
12H	4H	13.23	13.64	14.30	14.71	16.13	19.04	19.44	20.11	20.51	21.94
	6H	13.59	13.92	14.67	15.00	16.43	19.69	20.02	20.77	21.10	22.54
	8H	13.66	13.95	14.75	15.03	16.50	19.92	20.21	21.01	21.29	22.76