

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: P936305

Luminaire Tested: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

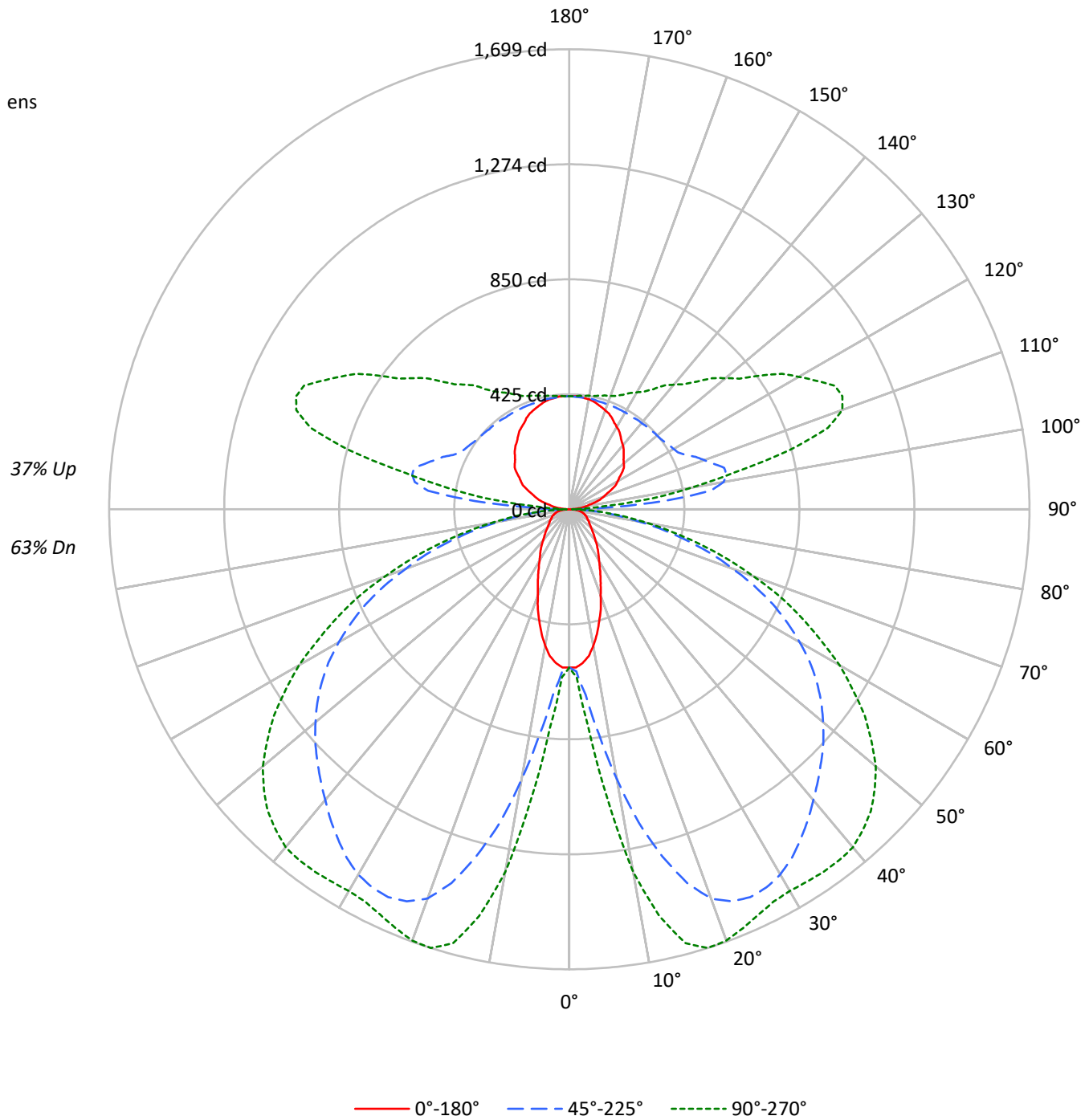
Test Method: LM-79-2019  
Report Number: P936305  
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7233.8 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 66  
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

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

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

	0°	45°	90°
0°	1808	1808	1808
5°	1767	2090	2430
10°	1603	3047	4029
15°	1363	3982	4864
20°	1110	4616	4958
25°	926	4831	4857
30°	782	4863	4848
35°	691	4784	4973
40°	603	4680	5103
45°	546	4605	5123
50°	502	4537	5038
55°	481	4437	4814
60°	493	4244	4462
65°	514	3950	3977
70°	548	3448	3360
75°	610	2813	2622
80°	672	1954	1767
85°	609	1038	904

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5123 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.6	1.0
10°-20°	335.1	4.6
20°-30°	586.1	8.1
30°-40°	754.5	10.4
40°-50°	842.7	11.6
50°-60°	807.2	11.2
60°-70°	639.7	8.8
70°-80°	376.1	5.2
80°-90°	106.1	1.5
90°-100°	203.8	2.8
100°-110°	535.9	7.4
110°-120°	555.7	7.7
120°-130°	445.7	6.2
130°-140°	349.7	4.8
140°-150°	268.4	3.7
150°-160°	193.3	2.7
160°-170°	118.3	1.6
170°-180°	40.0	0.6
0°-30°	996.8	13.8
0°-40°	1751.3	24.2
0°-60°	3401.2	47.0
0°-90°	4523.1	62.5
90°-120°	1295.4	17.9
90°-150°	2359.2	32.6
90°-180°	2711.0	37.5
0°-180°	7233.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	570	611	688	778	806	53
15°	427	788	1327	1609	1659	119
25°	272	893	1580	1650	1652	126
35°	184	853	1488	1573	1635	115
45°	126	680	1316	1507	1575	97
55°	90	432	1116	1297	1332	82
65°	72	229	829	932	945	71
75°	53	141	455	500	502	55
85°	19	43	113	124	126	20
90°	3	8	21	11	11	4
95°	27	106	351	181	123	30
105°	97	146	592	899	839	102
115°	172	208	475	947	1080	169
125°	238	268	432	729	860	212
135°	284	313	418	589	668	220
145°	330	351	413	502	542	207
155°	373	383	413	453	466	171
165°	402	408	413	429	434	114
175°	418	418	416	421	421	40
180°	418	418	418	418	418	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5
2.5°	584.5	584.5	588.2	590.1	593.8	595.7	599.5	603.3	614.6	616.4	620.2
5°	569.5	576.9	601.4	610.7	637.1	672.8	687.8	712.3	763.0	778.0	787.5
7.5°	546.9	563.8	623.9	638.9	704.8	798.8	838.2	890.8	971.6	1011.1	1043.0
10°	511.2	546.9	654.0	689.8	796.8	939.7	1012.9	1086.2	1208.4	1263.0	1283.6
12.5°	471.7	530.0	685.9	734.8	888.9	1097.5	1185.9	1266.7	1405.8	1479.1	1490.3
15°	426.7	505.6	716.0	787.5	986.7	1229.1	1326.8	1426.4	1556.1	1608.7	1621.9
17.5°	387.1	486.7	744.2	819.4	1061.9	1347.5	1447.0	1529.8	1635.1	1670.7	1680.2
20°	338.3	456.7	763.0	860.8	1140.8	1434.0	1529.8	1593.7	1665.1	1687.6	1691.4
22.5°	302.6	424.7	774.3	875.8	1193.4	1486.6	1567.3	1618.2	1667.0	1674.5	1676.3
25°	272.5	389.0	772.4	892.7	1238.5	1518.5	1580.5	1618.2	1646.3	1650.1	1650.1
27.5°	244.3	349.6	764.9	896.5	1272.3	1526.1	1574.9	1601.2	1614.3	1621.9	1621.9
30°	219.9	312.0	746.1	888.9	1287.3	1518.5	1558.0	1571.2	1584.3	1595.6	1601.2
32.5°	201.1	276.3	717.9	873.9	1289.2	1499.7	1527.9	1535.4	1554.2	1580.5	1589.9
35°	184.2	240.6	685.9	853.2	1278.0	1469.6	1488.4	1496.0	1533.5	1573.0	1586.1
37.5°	167.3	214.3	644.6	817.5	1261.0	1434.0	1447.0	1460.2	1518.5	1565.5	1580.5
40°	150.4	191.7	595.7	778.0	1234.7	1390.7	1402.0	1422.7	1499.7	1554.2	1569.2
42.5°	137.2	172.9	543.1	736.7	1200.9	1341.9	1358.8	1388.9	1477.1	1535.4	1552.3
45°	125.9	154.1	486.7	680.3	1157.7	1291.1	1315.5	1356.9	1450.9	1507.2	1522.2
47.5°	114.6	140.9	428.5	622.0	1110.7	1240.4	1272.3	1319.3	1415.1	1469.6	1482.8
50°	105.3	127.8	370.2	560.0	1059.9	1185.9	1223.4	1272.3	1370.1	1420.8	1437.7
52.5°	97.7	116.6	315.7	498.0	1001.7	1129.5	1172.7	1223.4	1315.5	1364.4	1375.7
55°	90.2	107.1	268.7	432.3	941.6	1069.3	1116.3	1165.2	1255.4	1296.8	1304.2
57.5°	86.5	99.6	229.3	370.2	877.7	1001.7	1054.3	1099.4	1183.9	1216.0	1223.4
60°	80.8	94.0	199.2	317.7	808.1	937.8	982.9	1028.0	1099.4	1125.8	1131.4
62.5°	75.2	90.2	176.6	266.8	736.7	862.6	907.8	949.0	1009.2	1028.0	1035.5
65°	71.5	86.5	159.7	229.3	663.4	783.7	828.8	864.5	913.4	932.1	935.9
67.5°	67.6	82.7	146.5	197.4	590.1	704.8	738.6	772.4	810.0	828.8	830.7
70°	62.0	78.9	135.3	174.8	514.9	614.6	642.8	678.5	708.5	717.9	723.6
72.5°	58.3	73.3	127.8	157.8	437.9	528.1	554.4	575.1	601.4	610.7	610.7
75°	52.6	65.8	120.3	140.9	358.9	432.3	454.8	475.5	496.1	499.9	494.3
77.5°	47.0	58.3	103.4	118.4	280.0	342.0	360.8	372.1	389.0	392.7	394.6
80°	39.5	50.7	80.8	92.1	203.0	251.8	265.0	274.4	289.4	289.4	293.2
82.5°	30.1	39.5	58.3	65.8	137.2	172.9	184.2	189.8	199.2	199.2	199.2
85°	18.8	24.5	37.5	43.2	82.7	105.3	112.7	114.6	122.2	124.0	124.0
87.5°	9.4	13.2	24.5	26.3	43.2	54.5	54.5	58.3	58.3	56.4	54.5
90°	2.8	5.0	7.3	7.8	12.3	18.3	21.3	19.0	14.2	10.6	10.6
92.5°	11.2	30.3	49.4	54.2	76.1	105.4	120.1	105.3	75.6	53.3	51.2
95°	26.9	61.8	96.8	105.5	187.4	296.5	351.1	313.3	237.7	181.0	174.6
97.5°	46.6	77.4	108.3	115.9	252.4	434.4	525.4	501.5	453.7	417.9	405.6
100°	61.7	89.7	117.6	124.6	276.1	478.0	579.0	580.8	584.2	586.8	572.3
102.5°	74.6	100.7	126.7	133.3	286.9	491.8	594.1	624.6	685.4	731.0	718.5
105°	96.6	118.6	140.7	146.2	295.0	493.2	592.4	660.6	797.1	899.4	892.7
107.5°	119.0	139.5	160.2	165.3	296.5	471.3	558.7	653.9	844.2	987.1	988.6
110°	134.1	152.7	171.3	176.0	294.2	451.9	530.7	637.1	849.8	1009.5	1016.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	149.1	166.7	184.5	188.9	294.3	434.9	505.2	614.1	831.8	995.2	1005.9
115°	171.5	187.8	204.2	208.3	297.0	415.3	474.6	579.5	789.2	946.6	961.5
117.5°	193.6	208.5	223.3	227.1	302.5	403.2	453.6	548.3	737.6	879.5	896.1
120°	206.5	220.5	234.5	238.0	307.0	399.0	445.1	531.5	704.6	834.3	850.4
122.5°	219.2	233.3	247.3	250.9	313.5	396.9	438.6	516.5	672.3	789.1	804.9
125°	238.5	251.4	264.3	267.5	322.2	395.2	431.6	497.7	630.1	729.4	743.9
127.5°	254.2	267.2	280.2	283.5	330.9	394.1	425.7	482.5	596.2	681.4	693.7
130°	262.6	276.7	290.7	294.1	337.3	394.7	423.5	474.1	575.3	651.1	662.5
132.5°	271.4	285.3	299.3	302.8	342.4	395.2	421.5	466.8	557.4	625.3	635.5
135°	284.3	297.0	309.7	312.9	348.0	394.8	418.2	456.1	531.9	588.8	597.6
137.5°	297.5	310.1	322.6	325.8	356.4	397.2	417.6	449.6	513.7	561.8	569.0
140°	308.4	320.0	331.7	334.6	361.6	397.6	415.6	443.3	498.7	540.2	547.0
142.5°	316.8	327.6	338.3	341.0	365.8	399.0	415.6	439.9	488.6	525.1	530.9
145°	329.8	339.1	348.5	350.8	371.5	399.0	412.8	432.7	472.5	502.3	506.7
147.5°	342.7	351.7	360.9	363.1	379.7	401.8	412.8	428.5	459.8	483.3	486.9
150°	351.1	359.3	367.5	369.6	384.0	403.2	412.8	426.1	452.5	472.3	475.2
152.5°	359.8	366.0	372.2	373.8	386.8	404.1	412.8	424.1	446.7	463.6	465.9
155°	372.7	377.2	381.9	383.0	392.9	406.2	412.8	421.8	439.8	453.3	454.8
157.5°	382.2	386.7	391.3	392.4	399.2	408.3	412.8	419.8	433.7	444.2	445.2
160°	388.7	392.2	395.7	396.6	402.0	409.2	412.8	418.8	430.8	439.7	440.3
162.5°	395.2	397.8	400.4	401.1	405.0	410.2	412.8	417.9	428.0	435.5	436.1
165°	402.2	404.5	406.9	407.5	409.3	411.6	412.8	416.5	423.7	429.1	429.6
167.5°	408.6	409.7	410.9	411.1	412.6	414.6	415.6	418.0	422.7	426.3	426.6
170°	412.8	413.9	415.1	415.3	415.4	415.5	415.6	418.0	422.7	426.3	426.3
172.5°	415.1	415.3	415.5	415.6	415.6	415.6	415.6	417.5	421.2	424.0	423.8
175°	418.2	418.2	418.2	418.2	417.3	416.2	415.6	416.8	419.2	421.0	421.0
177.5°	418.2	418.2	418.2	418.2	417.5	416.7	416.2	417.1	419.0	420.4	420.1
180°	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	584.5	584.5
2.5°	623.9	620.2
5°	802.5	806.2
7.5°	1080.6	1078.8
10°	1343.7	1360.7
12.5°	1535.4	1539.1
15°	1652.0	1659.4
17.5°	1697.1	1698.9
20°	1698.9	1695.2
22.5°	1678.2	1674.5
25°	1653.8	1652.0
27.5°	1631.2	1633.2
30°	1621.9	1627.5
32.5°	1621.9	1631.2
35°	1625.6	1635.1
37.5°	1623.8	1635.1
40°	1616.2	1629.4
42.5°	1595.6	1605.0
45°	1563.6	1574.9
47.5°	1522.2	1529.8
50°	1469.6	1477.1
52.5°	1403.9	1405.8
55°	1325.0	1332.4
57.5°	1240.4	1242.2
60°	1146.4	1152.0
62.5°	1046.8	1046.8
65°	941.6	945.3
67.5°	832.6	841.9
70°	721.7	723.6
72.5°	612.7	612.7
75°	499.9	501.7
77.5°	392.7	392.7
80°	291.3	293.2
82.5°	201.1	204.8
85°	125.9	125.9
87.5°	58.3	52.6
90°	10.6	10.6
92.5°	42.8	34.3
95°	148.9	123.2
97.5°	356.8	307.8
100°	514.1	455.8
102.5°	668.7	618.8
105°	865.9	839.1
107.5°	995.2	1001.6
110°	1044.4	1072.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1048.8	1091.7
115°	1021.0	1080.5
117.5°	962.0	1028.0
120°	914.5	978.6
122.5°	868.2	931.5
125°	802.1	860.4
127.5°	742.8	791.9
130°	707.9	753.3
132.5°	676.1	716.8
135°	632.6	667.6
137.5°	597.7	626.4
140°	573.8	600.6
142.5°	554.0	577.0
145°	524.2	541.6
147.5°	501.4	515.8
150°	487.0	498.7
152.5°	474.7	483.5
155°	460.6	466.4
157.5°	449.4	453.6
160°	442.7	445.1
162.5°	438.3	440.6
165°	432.1	434.4
167.5°	427.5	428.5
170°	426.3	426.3
172.5°	422.9	422.1
175°	421.0	421.0
177.5°	419.2	418.2
180°	418.2	418.2



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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	4.13	5.17	4.97	6.03	7.11	17.32	18.36	18.16	19.22	20.30
	3H	4.85	5.79	5.70	6.66	7.76	19.18	20.12	20.03	20.99	22.09
	4H	5.16	6.04	6.02	6.92	8.03	19.84	20.72	20.70	21.60	22.72
	6H	5.42	6.23	6.29	7.12	8.25	20.28	21.10	21.16	21.99	23.11
	8H	5.49	6.27	6.37	7.17	8.30	20.41	21.19	21.29	22.10	23.22
	12H	5.51	6.26	6.40	7.16	8.31	20.49	21.23	21.38	22.13	23.28
4H	2H	11.38	12.26	12.24	13.14	14.25	17.62	18.50	18.49	19.38	20.50
	3H	12.96	13.70	13.84	14.61	15.74	19.69	20.43	20.56	21.34	22.47
	4H	13.06	13.74	13.95	14.65	15.80	20.46	21.14	21.36	22.05	23.20
	6H	13.08	13.67	13.99	14.60	15.76	21.02	21.61	21.92	22.54	23.69
	8H	13.07	13.61	13.97	14.54	15.71	21.19	21.74	22.10	22.66	23.83
	12H	13.03	13.53	13.96	14.47	15.65	21.29	21.79	22.22	22.73	23.91
8H	4H	14.53	15.08	15.43	16.00	17.17	20.54	21.09	21.45	22.01	23.19
	6H	14.78	15.23	15.71	16.20	17.37	21.18	21.64	22.12	22.60	23.77
	8H	14.80	15.20	15.74	16.16	17.35	21.41	21.81	22.35	22.77	23.96
	12H	14.77	15.13	15.72	16.08	17.32	21.56	21.92	22.51	22.87	24.11
12H	4H	14.68	15.18	15.61	16.12	17.30	20.50	21.00	21.43	21.94	23.12
	6H	15.04	15.44	15.98	16.40	17.59	21.17	21.57	22.11	22.53	23.72
	8H	15.12	15.47	16.07	16.42	17.66	21.41	21.77	22.36	22.72	23.95